

**A STUDY ON DIAGNOSTIC METHODOLOGY
NEERKKURI NEIKKURI OF
MANTHAARA KAASAM - BRONCHIAL ASTHMA**

(DISSERTATION SUBJECT)



For the partial fulfillment of the requirements to the Degree of

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ACKNOWLEDGEMENT...

neerkkuri neikkuri

- Manthara Kaasam



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INTRODUCTION...

neerukkuri neikkuri

- Manthara Kaasam



Siddha system of medicine is a treasure dedicated to the world by Siddhars. Siddhars are ancient scientists who preached the knowledge about human physiology, pathology, management and prevention of disease in a holistic, encrypted but with keys to decode it. Out of many wings of siddha, pathology stands very essential to deal with disease of the present world. They used certain diagnostic methodology to find the root cause of diseases.

The methodology of diagnosing the diseases in our system is based on ‘En vagai thervu’. Urine examination is one of those ‘Envagai thervugal’

“வந்த நீர்க்கரி எடை மணம் நுரை எஞ்சலென்
றைந்தியலுளவவை யறைகுது முறையே”

Urine examination has got demonstrable objectivity with clear cut tangible rules laid down by Siddhars which will reduce the variations in examination between one physician and another .

The urine examination consists of macroscopic observation of colour, odour, froth, density and deposits. Apart from this general examination of urine, there is a unique methodology of urine examination originally conceived and crafted by Siddhars in which a drop of gingely oil is instilled over the urine sample surface collected under standard set of conditions. This unique methodology is called as “Neikuri”. The word ‘Nei’ in Tamil means oil or gingely oil to be more precise. ‘Kuri’ refers to sign. The procedure and various patterns in Neikuri are illustrated in the text of Theran, a Siddhar who excelled in propounding urine examination procedures.

Neikkuri is dropping sesame oil drop onto the mid stream urine sample surface collected in a crystal glass bowl during early morning. The mode of spreading nature of oil indicates the prognosis and diagnosis of diseases.

In Siddha system, diseases are defined as alteration in own nature of seven udal thathukkal and Uyir thathukkal in gross material body and also in subtle body. One among such diseases is ‘MANTHAARA KAASAM’

A worldwide rise in the prevalence of asthma is being reported with increase in wheeze at an alarming rate of 5% per year. From 1983 onwards an increase in asthma mortality and morbidity has been noticed worldwide. This condition is developed on the allergic constitutional setting in an individual. This hypersensitive nature can be modulated by various treatments and Siddha system has a major role in this regard. Therefore, a simple and cost effective diagnostic tool needs to be developed which will enable physicians to detect this hypersensitive nature at the time treatment commencement, during the course and even during the symptom free period.

Hence this study explores the possibility of establishing this investigation procedure in diagnosing the 'MANTHARA KAASAM' and will be the low economic technique available to common man.

AIM & OBJECTIVE...

neerkkuri neikkuri

- Manthara Kaasam



AIM AND OBJECTIVES

AIM:

To develop the Neerkkuri , Neikkuri examination in Siddha system as a cost effective,yet powerful tool for diagnose and appropriate prognosis of the condition Manthaara kaasam.

OBJECTIVES:

- To document the diagnostic patterns of Neerkkuri, Neikkuri in Manthaara kaasam/Bronchial asthma.
- To observe for any significant Neerkkuri, Neikkuri pattern which may provide a clue in th diagnosis,prognosis or its complication.
- To establish the review of literature.
- To compare the neikkuri patterns of Manthaara kaasam patients with Modern parameters.
- To elucidate the three shapes of Neerkkuri, Neikkuri on the three consecutive days.

REVIEW OF LITERATURE - SIDDHA ASPECTS...

neerkkuri neikkuri

- Manthara Kaasam



SIDDHA PHYSIOLOGY...

neerkkuri neikkuri

- Manthaara Kaasam



SIDDHA PATHOLOGY...

neerkkuri neikkuri

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SIDDHA DIAGNOSTIC METHODOLOGY...

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3.A.SIDDHA PHYSIOLOGY

3. A.1. SUGARANA NILAI (PHYSIOLOGICAL STATE) IN SIDDHA MEDICINE:

The five basic elements, namely Aagayam (Space), Kaal (Air), Thee (Fire), Neer (Water), and Mann (Earth) are the building blocks of all the physical and subtle bodies existing in this whole universe. These are called as the ‘Adippadai Boothams’ (Basic Elements) (or) ‘Panchaboothams’.

These five elements together constitute the human body and origin of other material objects are explained as Panchaekarana (Mutual Intra Inclusion). None of these elements could act independently by themselves. They could act only in co-ordination with other four elements. All the living creatures and the non-living things are made up of these five basic elements. The five basic elements form the connecting link between the Microcosm (Man) and Macrocosm (World) . This concept is evident from Siddhar’s lines,

“ அண்டத்தில் உள்ளதே பிண்டம்;
பிண்டத்தில் உள்ளதே அண்டம்”

Any change in the universe due to natural or unnatural causes will create changes in human systems. For example the natural disorders like cyclone, heavy rain, mist and scorching sun or man created impurities of air and water will create changes both in the atmosphere and in the human body. Hence the change in the elementary conditions of external world has its corresponding change in the human organs.

உலகம் பஞ்ச பூதம்

“நிலம் நீர்தீவளி விசும்போடைந்தும்
கலந்தமயக் கமுலகம் மாதலின்”

-தொல்காப்பியம்

தேகம் பஞ்ச பூதம்

“தலங்காட்டி இந்தச் சடமான ஐம்பூதம்
நிலங்காட்டி நீர் காட்டி நின்றிடுந் தீ காட்டி
வலங்காட்டி வாயுவால் வளர்ந்தே இருந்தது
குலங்காட்டி வானில் குடியாய் இருந்ததே”.

-பதினென் சித்தர் நாடி சாஸ்திரம்

As per the above lines, the universe and the human body are made of five basic elements.

3. A.2. THE 96 BASIC PRINCIPLES (96 Thathuvam)

According to Siddha system of medicine, 'Thathuvam' is considered as a science that deals with basic functions of the human body. Siddhars described 96 principles as the basic constituents of human body that include physical, physiological, psychological and intellectual components of an individual. These 96 Thathuvams are considered to be the cause and effect of our physical and mental well-being. The Thathuvam is the author of the conception of human embryo on which the theory of medicine is based.

1. BOOTHAM – 5 (*ELEMENTS*)

1. Aagayam - Firmament
2. Vaayu - Flatus(Air)
3. Thee - Fire
4. Neer - Fluid(Water)
5. Mann - Firm Ground(Earth)

2. PORI – 5 (*SENSE ORGANS*)

1. Sevi (Ear) -a structural component of 'Aagayam' bootham
2. Thol (Skin) -a structural component of 'Vaayu' bootham
3. Kann (Eye) -a structural component of 'Thee' bootham
4. Naakku (Tongue) -a structural component of 'Neer' bootham
5. Mookku (Nose) -a structural component of 'Mann' bootham

3. PULAN – 5 (*FUNCTIONS OF SENSE ORGANS*)

1. Kaetal -Hearing, a functional component of Aagayam bootham
2. Thoduthal -Touch, a functional component of Vaayu bootham
3. Paarthal -Vision, a functional component of Thee bootham
4. Suvaithal -Taste, a functional component of Neer bootham
5. Nugarthal -Smell, a functional component of Mann bootham

4. KANMENTHIRIYAM – 5 (*MOTOR ORGANS*)

1. Vaai (Mouth) - Speech is delivered in relation with Space element.
2. Kaal (Leg) - Walking takes place in concordance with Air element.
3. Kai (Hands) - Giving/Taking are carried out with the influence of Fire element.
4. Eruvaai (Rectum) - The excreta is eliminated in association with Water element.
5. Karuvaai (Sex Organs) - The Sexual acts are carried out in association with the earth element.

5. KARANAM – 4 (*INTELLECTUAL FACULTIES*)

1. Manam - Thinking about something
2. Bhuddhi - Deeply analyzes the same
3. Agankaaram - Determination to do the same
4. Siddham - Accomplishment of the determined thing

6. ARIVU – 1 (*WISDOM OF SELF REALIZATION*)

To analyze good and bad

7. NAADI – 10 (*CHANNELS OF LIFE FORCE RESPONSIBLE FOR THE DYNAMICS OF PRANAN*)

1. Idakalai - Starts from the right big toe, runs criss-cross to end in the left nostril
2. Pinkalai - Starts from the left big toe, runs criss-cross to end at the right nostril.
3. Suzhumunai - Starts from moolaathaaram and extends upto centre of head
4. Siguvai - Located at the root of tongue; it helps in the swallowing of food and water
5. Purudan - Located in right eye.
6. Kanthari - Located in left eye.
7. Atthi - Located in right ear.
8. Allampudai - Located in left ear.
9. Sangini - Located in genital organ
10. Gugu - Located in ano-rectal region

8. VAAYU – 10 (*VITAL NERVE FORCE WHICH IS RESPONSIBLE FOR ALL KINDS OF MOVEMENTS*)

1. Uyir kaal (Piraanan)

This is responsible for the respiration of the tissues, controlling knowledge, mind and five sense organs and digestion of the food taken in.

2. Keel nokku kaal (Abanan)

It lies below the umbilicus. It is responsible for the downward expulsion of stools and urine, ejaculation of semen and menstruation.

3. Paravu kaal (Viyanan)

This is responsible for the motor and sensory function of the entire body and the distribution of nutrients to various tissues.

4. Mael nokku kaal (Uthanan)

It originates at Utharakini. It is responsible for digestion, absorption and distribution of food. It is responsible for all the upward movements.

5. Samaanan (Nadu kaal)

This is responsible for the neutralization of the other 4 Valis i.e. Piranan, Abanan, Viyanan and Uthanan. Moreover it is responsible for the nutrients and water balance of the body.

6. Naagan

It is a driving force of eye balls responsible for movements.

7. Koorman

It is responsible for the opening and closing of the eyelids and also vision. It is responsible for yawning.

8. Kirukaran

It is responsible for the salivation of the tongue and also nasal secretion. Responsible for cough and sneezing and induces hunger.

9. Devathathan

This aggravates the emotional disturbances like anger, lust, frustration etc. As emotional disturbances influence to a great extent the physiological activities, it is responsible for the emotional upsets.

10. Dhanancheyan

Expelled three days after the death by bursting out of the cranium. It is responsible for edema, plethora and abnormal swelling in the body in the pathological state.

9. AASAYAM – 5 (VISCERAL CAVITIES)

1. Amarvasayam (Reservoir Organ) - Stomach. It lodges the ingested food.
2. Pakirvasayam (Absorption Site)-Small intestine. The digestion and assimilation of food, absorption of saaram from the digested food are done by this asayam.
3. Malavasayam (Excretory organ for solid waste) -Large Intestine, especially rectum, the place where the expulsion of undigested food parts and flatus takes place.
4. Chalavasayam (Excretory organ for liquid waste)- Urinary Bladder, kidney. Site of the formation and excretion of urine.
5. Sukkilavasyam (Genital organs.) –Site of production and development of spermatzoa and ovum.

10. KOSAM – 5 (FIVE STATUS OF THE HUMAN BODY OR SHEATH)

1. Annamaya Kosam -Gastro intestinal system
2. Pranamaya Kosam - Respiratory system

3. Manomaya Kosam - Mental System
4. Vignanamaya Kosam - Nervous system and higher intellect
5. Aananthamaya Kosam -Reproductive system

11. AATHARAM – 6 (STATIONS OF SOUL) “ஓம் ந ம சி வா ய”

1. Moolatharam

Situated at the base of spinal column between genital and anal orifice and beneath the perineum. Letter “ஓம்” is stationed here.

2. Swathitanam

Located 2 fingerwidths above the Moolaathaaram, (i.e.) midway between genital and navel region. Letter “ந” is inherently present here. Earth element is attributed to this region.

3. Manipooragam

Located 8 fingerwidths above the Swathitanam, (i.e.) at the naval center. Letter “ம” is inherently present here. Element is water.

4. Anakatham

Located 10 fingerwidths above Manipooragam, (i.e.) location of heart. Letter found is “சி”. Element is fire.

5. Visuthi

Located 10 fingerwidths above the Anakatham (i.e.) located in throat. Letter “வா” is inherently present. Element is Air.

6. Aakinai

Situated between the two eyebrows. Letter “ய” is inherently present here. Element is space.

12. MANDALAM – 3 (REGIONS)

1. Thee Mandalam (fire zone)

Fire Zone is found 2 finger widths above the Moolaathaaram

2. Gnayiru Mandalam (Solar zone)

Solar zone, located 4 finger widths above the umbilicus.

3. Thingal Mandalam (lunar zone)

Lunar zone is situated at the center of two eye brows

13. MALAM – 3 (THREE IMPURITIES OF THE SOUL)

1. Aanavam

This act clouds the clarity of thought, cognitive power of the soul, yielding to the egocentric consciousness like 'I' and 'Mine' claiming everything to be his own (Greediness).

2. Kanmam

Goes in collaboration with the other two responsible for incurring Paavam (the Sin) and Punniyam (Sanctity / virtuous deed).

3. Mayai

Serves as an obstacle due to the mentality of claiming ownership of the others property and thereby inviting troubles.

14. THODAM- 3 (THREE HUMOURS)

1. Vali (Vatham) - It is the creative force formed by combination of Vaayu and Aakaya bootham
2. Azhal (Pitham) - It is the protective force. Formed by Thee bootham
3. Iyam (Kabam) -It is the destructive force. Formed by Mann and Neer Bootham

15. EADANAI -3 (PHYSICAL BINDINGS)

1. Porul Patru - Materialistic affinity
2. Puthalvar Patru - Sibbling / Familial bonding
3. Ulaga Patru - Worldly affections

16. GUNAM – 3 (THREE COSMIC QUALITIES)

1. Sathuvam (Characters of Renunciations or Ascetic Virtues)
The grace, control of senses, wisdom, penance, generosity, Excellence, calmness, truthfulness is the 8 qualities attributed to their benevolent trait.
2. Raasatham (Royal character)
Enthusiasm, wisdom, valour, virtue, penance, offering gift, art of Learning, listening are the 8 traits
3. Thamasam (Carnal / Immoral Character)
Immorality, lust, anger, murderousness, violation of justice, gluttony, falsehood, forgetfulness, fraudulence, etc.

17. VINAI – 2 (ACT)

1. Nalvinai - Good Acts (Meritorious acts)
2. Theevinai - Bad Acts (Sinful acts)

18. RAGAM – 8 (THE EIGHT PASSIONS)

1. Kaamam - Lust
2. Kurotham - Grudge / Hatred
3. Ulobam - Stingy
4. Moham - Infatuation
5. Matham - Rut (The feeling of high ego towards oneself)
6. Marcharyam - Internal Conflict, Envy
7. Idumbai - Mockery
8. Ahankaram - High Ego

19. AVATHAI – 5 (FIVE STATES OF CONSCIOUSNESS)

1. **Ninaivu** - State of wakefulness with the 14 karuvikaranathigal in all vibrancy (5 Pulan, 5 Kanmaenthiriyam and 4 Karanam) and is able to experience the pleasures and pains
2. **Kanavu** – State of dreams. In this 10 karuvikaranathigal (5 Pulan, 5 Kanmaenthiriyam) except karanam all lies dormant in the neck.
3. **Urakkam** - State of Sleep after which one cannot recapitulate what is seen or heard. The respiration lies in the heart.
4. **Perurakkam** - State of Repose (Tranquil or Peaceful State). The Jeevaathma lies in the naabi, producing the respiration.
5. **Uyirpadakkam** – Oblivious of the surroundings. The Jeevaathma is deeply immersed in Moolaathaaram resulting in a state of unawareness.

3. A.3.THE UYIR THATHUKKAL

The physiological units of the Human body are,

- Vali (Vatham),
- Azhal (Pitham) and
- Iyyam (Kapham).

They are also formed by the combination of the five basic elements. Accordingly Vali is formed by the combination of Vali (Air) and Aagayam (Space). This is the Creative force. Azhal is formed by Thee (Fire). This is the Force of Preservation. Iyyam is formed by Mann (Earth) and Neer (Water). This is the Destructive Force. These three humors are in the ratio 4:2:1 in equilibrium which is a healthy normal Condition. They are called as the life forces or humours.

“ பொங்கிய தைந்துக்குள் பொல்லாதது இம் மூன்றுதான்
தங்கிய வாயு சமத்தன் மகாவாதம்
பங்கிய வன்னியால் பகுந்தது பித்தமே
பகுந்த சலத்தில் பரிசிக்கும் நல்லையும்
வகுந்த இம்மூன்றால் வளர்ந்தது நோயெல்லாம்
அகுந்தது தானறிந்து அளவிட்ட யோகிகள்
மகிழ்ந்தே யிதில் நின்ற மயக்கம் அறிவாறே”

-பதினெண் சித்தர் நாடி சாஸ்திரம்

THE FORMATION OF UYIR THATHUKKAL,

மூவகை நாடியும் உயிர் தாதுவும்
“தாது முறையே தனிஇடை வாதமாம்
போதுறு பின்கலை புகன்றது பித்தமாம்
மாது சுழுமுனை வழங்கிடும் ஐயமாம்
ஒது முறை பார்த்து உணர்ந்தவர் சித்தரே”

-பதினெண் சித்தர் நாடி சாஸ்திரம்

மூவகை வாயுவும் உயிர் தாதுவும்
“உணர்ந்த அபானன் உறும் அந்த வாதத்தில்
புணர்ந்த பிராணன் புகும் அந்தப் பித்தத்தில்
அணைந்த சமானன் அடங்கும் கபத்தோடு
இணைந்திவை மூன்றுக்கு எடுத்த குறி ஒன்றே”

-பதினெண் சித்தர் நாடி சாஸ்திரம்

The Vali naadi is formed by the combination of Abanan and Idagalai.

The Azhal naadi is formed by the combination of Piranan and Pinkalai.

The Iyya naadi is formed by the combination of Samanan and Suzhumunai.

I.Vali (Vatham)

Vali is soft, fine and the temperate (coolness and hotness) which could be felt by touch.

The sites of vali

According to **Vaithya Sathakam**, Vali dwells in the following places:

“நெளிந்திட்ட வாதமபானத்தைப் பற்றி
நிறைந்திடையைச் சேர்ந்துந்திக் கீழே நின்று
குளிந்திட்ட மூடமதூ டெழுந்து காமக்
கோடியிடையைப் பற்றியெழுங் றொக்கை நாடி

நிணமான பொருத்திடமும் ரோமக் காலும்
நிறைவாகி மாங்கிசமெல் லாம்பரந்து“

-வைத்திய சதகம்

Umbilicus, Rectum, Faecal matter, Abdomen, Anal region, Bones, Hip joints, Navel Plexus, Joints, Hair follicle and Muscles.

“அறிந்திடும் வாத மடங்கு மலத்தினில்“

-திருமூலர்

“நாமென்ற வாதத்துக் கிருப்பிடமே கேளாய்
நாபிக்குக் கீழென்று நவில லாகும்“

-யுகி

According to Sage Thirumoolar and Sage Yugi muni, the location of Vatham is the anus and the sub navel region.

Properties of Vali

“ஒழுங்குடனே தாதேழ் மூச்சோங்கி இயங்க
எழுச்சிபெற எப்பணியுமாற்ற எழுந்திரிய
வேகம் புலன்களுக்கு மேவச் சுறுசுறுப்பு
வாகளிக்கும் மாந்தர்க்கு வாயு“

-சித்த மருத்துவாங்கச் சுருக்கம்

The following are the natural properties of Vali

- 1) To stimulate the respiration
- 2) To activate the body, mind and the intellect.
- 3) To activate the fourteen different types of natural reflexes or urges.
- 4) To activate the seven physical constituents in functional co- ordination.
- 5) To strengthen the five sense organs.

In the above process Vatham plays a vital role in assisting the body functions.

II. Azhal (Pitham)

The nature of Azhal is Atomic. It is sharp and hot. The ghee becomes watery, salt crystallises and jaggery melts because of heat. The heat of Azhal is responsible for many actions and their reactions.

The sites of Azhal

According to **Vaithiya Sathagam**, the Pingalai, Urinary bladder, Stomach and Heart are the places where Azhal is sustained. In addition to the above places, the umbilicus, epigastric region, stomach, sweat, saliva, blood, essence of food, eyes and skin

are also the places where Azhal sustains. Yugi muni says that, the Azhal resides in urine and in the places below the neck region.

The character of Azhal

Azhal is responsible for the digestion, vision, maintenance of the body temperature, hunger, thirst, taste etc. Its other functions include thought, knowledge, strength and softness.

The functions of Azhal

- 1) Maintenance of body temperature
- 2) Produces reddish or yellowish colour of the body.
- 3) Produce heat energy on digestion of food.
- 4) Produces sweating
- 5) Induces giddiness.
- 6) Produces blood and the excess blood is let out.
- 7) Gives yellowish colouration to the skin, eyes, faeces and urine
- 8) Produce anger, heat, burning sensation, inaction and determination.
- 9) Gives bitter or sour taste.

Types of Azhal

1. Aakkanal – Anila pitham or Prasaka pitham – The fire of digestion.

It lies between the stomach and the intestine and causes digestion and dries up the moist ingested substance.

2. Vanna eri – Ranjaga pitham – Blood promoting fire

This fire lies in the stomach and gives red colour to the chyle and produces blood. It improves blood.

3. Aatralanki – Saathaga pitham – The fire of achievement

It gives energy to do the work.

4. Ulloli thee – Prasaka pitham – The fire of brightness.

It gives colour, complexion and lusture to the skin.

5. Nokku Azhal – Alosaga pitham – The fire of vision.

It lies within the eyes and causes the faculty of vision. It helps to visualize things.

III. Iyyam (Kapam)

The nature of Iyyam

Greasy, cool, dull, viscous, soft and compact are the natures of Iyyam.

Sites of Iyyam

Head, tongue, eyes, nose, throat, thorax, bone, bone marrow, Joints, blood, fat, sperm and colon are the sites of Iyyam. It also lies in stomach, spleen, the pancreas, chyle and lymph.

The natural quality of Iyyam

Stability, greasiness, formation of joints, the ability to withstand hunger, thirst, sorrow and distress are the qualities. It also helps to withstand sufferings.

Functions of Iyyam

Greasiness, strength, roughness, knowledge, cool, growth, heaviness of bone, restriction of joint movements, pallor, indigestion, deep sleep and to have a sweet taste in tongue are the functions of Iyyam. The skin, eyes, faeces and urine are white in colour due to the influence of Iyyam.

Five types of Iyyam

1. Azhal Iyyam -Avalambagam

Heart is the seat of Avalambagam. It controls all other 4 Iyyams

2. Neerpi iyyam -Kilethagam

Its location is stomach. It gives moisture and softness to ingested food.

3. Suvai kaan iyyam – pothagam

Its location is tongue. It is responsible for the sense of taste.

4. Niraivur iyyam – Tharpagam

It gives coolness to the eyes.

5. Ondri iyyam – Santhigam

It gives lubrication to the bones particularly in the joints

3.A.4. THE UDAL THATHUKKAL

Udal Thathukkal are the basic physical constituents of the body. They are also constituted by the Five Elements.

SEVEN PHYSICAL CONSTITUENTS OF THE BODY

- 1. Saaram** -This gives mental and physical perseverance.
- 2. Senneer** -Imparts colour to the body and nourishes the body
- 3. Oon** -It gives shape to the body according to the physical activity and plasters the skeleton to give the body a plumpy appearance.
- 4. Kozhuppu** -It lubricates the joints and other parts of the body for smooth functioning.

- 5. Enbu** -Supports the frame and responsible for the postures and movements of the body.
- 6. Moolai** -It occupies the medulla of the bones and gives strength and softness to them.
- 7. Sukkilam** -It is responsible for reproduction.

3. A.5. UDAL THEE (Four kinds of body fire)

There are four kinds of body fire. They are Samaakkini, Vishamaakkini, Deeshaakkini and Manthaakkini.

1. Samaakkini

The digestive fire is called as Samaakkini. This is constituted by Samana Vayu, Anala Pitham and kilethaga Kapham. If they are in normal proportion, then it is called as Samaakkini. It is responsible for the normal digestion of the food.

2. Vishamaakkini

Due to deranged and displaced Samana Vayu, it takes longer time for digestion of normal food. It is responsible for indigestion due to delay in digestive process.

3. Deeshaakkini

The Samana vayu blends up with the Azhal, which leads to increased Anala Pitham, so food is digested rapidly.

4. Manthaakkini

The Samana vayu conjugates with the Iyyam, which leads to increased Kilethaga Kapham. Therefore food is sluggishly digested for a very longer period leading to abdominal pain, distention, heaviness of the body etc.

3. A.6.THINAI

There are five thinai (the land)

- | | |
|---------------|--|
| 1. Kurinchi - | Mountain and associated areas |
| 2. Mullai - | Forest and associated areas |
| 3. Marudham- | Agricultural land and associated areas |
| 4. Neidhal - | The coastal and associated areas |
| 5. Paalai - | Desert and associated areas |

3. A.7. KAALAM

Ancient Tamilians divided a year into six different seasons known as Perumpozhudhu and likewise the day into six segments which are known as Sirupozhudhu

Perumpozhudhu:

A year is divided into six seasons. They are as follows

- Kaarkalam – Monsoon season (August 16 – October 15)
- Koothirkalam – Postmonsoon season (October 16 – December 15)
- Munpanikalam- Early winter season (December 16 – February 15)
- Pin panikalam – Late winter season (February 16 – April 15)
- Illavenilkalam – Early summer season (April 16 – June 15)
- Mudhuvenilkalam – Late summer season (June 16 – August 15)

Sirupozhuthu

A day is divided into six yamams. They are,

1. Maalai (Evening),
2. Idaiyammam (Midnight),
3. Vaikarai (Dawn),
4. Kaalai (Morning),
5. Nannpakal (Noon),
6. Erpadu (Afternoon).

Each perumpozhuthu and sirupozhuthu is associated with the three humors naturally.

3. A.8.FOURTEEN NATURAL REFLEXES/ URGES

The natural reflexes excretory, protective and preventive mechanisms are responsible for the urges and instincts. They are 14 in number,

1. Vatham (Flatus)
2. Thummal (Sneezing)
3. Siruneer (Micturition)
4. Malam (Defaecation)
5. Kottavi (Act of yawning)
6. Pasi (Sensation of hunger)
7. Neer vetkai (Sensation of thirst)
8. Erumal (Coughing)
9. Ellaipu (Fatigue)
10. Thookam (Sleep)
11. Vaanthi (Vomiting)
12. Kaneer (Tears)
13. Sukilam (Semen)
14. Suvasam (Breathing)

These natural reflexes are said to be an indication of normal functioning of our body. A proper maintenance should be carried out and they should not be restrained with force.

3.B.1. KUGARANA NILAI IN SIDDHA MEDICINE

According to Siddha System, human body sustains the state of healthy living via keeping the Three Humours- Vatham, Pitham and Kabam in equilibrium, influenced by dietary habits, daily activities and the environment around. The three humours represent the five basic elements or bhuthas. In case this equilibrium is disturbed, it leads to a condition known as disease. It is basically the derangement of five elements, which in turn alters the Three Humors. There can either be a decrease or increase in the balance.

3.B.2. DISEASE

Disease is also known by other names viz sickness, distemper, suffering and ailment, distress of mind, chronic disease and dreadful illness.

3.B.3. THE CHARACTERISTICS FEATURE OF DISEASE

Diseases are of two kinds:

1. Pertaining to the body
2. Pertaining to the mind according to the variation of the three humors.

1. Causes of Disease

Excepting the disease caused by our previous births, the disease is normally caused by the disparities in our food habits and actions. This has been rightly quoted in the following verses by Sage Thiruvalluvar,

"மிகினும் குறையினும் நோய்செய்யும் நூலோர்
வளிமுதலா வெண்ணிய மூன்று"

-திருவள்ளுவர்

The food and actions of a person should be in harmony with the nature of his body. Any increase or decrease in a humor viz. Vatham, Pitham, Kabam leads to the derangement of the three humors. The acceptance of food means the taste and quality of the food eaten and a person's ability to digest. 'Action' mean his good words, deeds or bad actions. According to Thiruvalluvar, the disease is caused due to the increase or decrease of three humors causing the upset of equilibrium.

So disease is a condition in which there is derangement in the five elements, which alters the three humors, reflected in turn in the seven physical constituents. The change could be an increase or decrease in the humours. This shows the following signs as pervitiation of the individual humour.

நோய் பிறக்கும் வகை

“பிணியினுற் பத்தியைப் பேசுவேன் பிணிமுதல்
வாதபித் தங்கப மன்மந்திரி தந்திரி
வீதமா யுடலரண் மெய்ப்புர வரச்செய்
முறைசெயு மாதலான் முதற்புர மென்றுட
கறைகுவ ராரிய ரதன்பரி வாரமா
நோய்க்கண மிகுதியி னணுகுநுட் பமதாய்ப்
பேய்க்கண மாமவை பெரும்பசி தாகுமூர்
வழிநடை வெயின்மழை மலிதணீர் நனைவுடன்
மந்தமாங் காரமாய் வார்த்தையா டுத(ற்)றுயில்
வந்தவை விலக்குதன் மாதரைக் கூடுதல்'
வெந்தறு கடகதம் வீரமாய்ச் சுமத்தலும்
மலசல பந்தனை வருமித னனமிகப்
பெலமுறு நோய்களும் பிறப்பதும் நிச்சயம்.“

- தேரையர் காப்பியம்

As per Theraiyar, the cause of disease is vitiated Vatha, Pitha and Kaba, increased appetite, increased thirst, excessive hot, anger, constipation, dysuria polluted water.

2. QUANTITATIVE CHANGES OF UYIR THATHUKKAL

HUMOUR	INCREASED	DECREASED
VALI (Vatham)	Wasting, blackish discoloration, affinity to hot foods, tremors, distended abdomen, constipation, weakness, insomnia, weakness in sense organs, giddiness and laziness.	Body pain, feeble voice, and diminished capability of the brain, decreased intellectual quotient, syncope and increased kaba condition.
AZHAL (Pitham)	Yellowish discolouration is conjunctiva, skin, urine and faeces, polyphagia, polydypsia, dyspepsia, burning sensation all over the body and decreased sleep.	Loss of appetite, cold, pallor and features of increased kabam.

3. U IYYAM (Kabam) A L	Loss of appetite, excessive salivation, diminished activity, heaviness, pallor, cold, decreased physical constituents, dyspnoea, flatulence, cough and excessive sleep.	Giddiness, dryness of the joints and prominence of bones. Profuse sweating in the hair follicles and palpitation.
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THATHUKAL

These are the changes produced when Udal thathukkal are affected.

UDAL KATTUKKAL	INCREASED FEATURES	DECREASED FEATURES
1. SARAM	Loss of appetite, excessive salivation, diminished activity, heaviness, pallor, cold, decreased physical constituents, dyspnoea, flatulence, cough & excessive sleep.	Dryness of skin, tiredness, loss of weight, lassitude and irritability while hearing louder sounds.
2. SENNEER	Boils in different parts of the body, splenomegaly, tumours, pricking pain, loss of appetite, haematuria, hypertension, reddish eye and skin, leprosy and jaundice.	Affinity to sour and cold food, nervous, debility, dryness and pallor.
3. OON	Tubercular adenitis, venereal diseases, extra growth around neck, cheeks, abdomen, thigh and genitalia.	Lethargic sense organs, pain in the joints, muscle wasting in mandibular region, gluteal region, penis and thighs.
4. KOZHUPPU	Identical feature of increased flesh, tiredness, dyspnoea on exertion, extra musculature in gluteal region, external genitalia, chest, abdomen and thighs.	Loins pain, splenomegaly and emaciation.

5.ENBU	Excessive ossification and dentition.	Joint pain, falling of teeth, falling and splitting of hairs and nails.
6.MOOLAI	Heaviness of the body and eyes, swollen interphalangeal joints, oliguria and non-healing ulcers.	Osteoporosis & Blurred vision.
7.SUKKILAM (OR) SURONITHM	Increased sexual activity, urinary calculi.	Dribbling of sukkilam/ suronitham or senner during coitus, pricking pain in the testis & inflamed and contused external genitalia.

4. KAALAM

Change in Elementary conditions of the external world has its corresponding change in the human organs. They are as follows:

KALAM	KUTTRAM	STATE OF KUTTRAM
1. Karkaalam (Rainy season) (Aavani – Puratasi) (Aug 16 – Oct 15)	Vatham ↑↑ Pitham ↑ Kabam (--)	Ectopic escalation Insitu escalation Restitution
2. Koothir Kaalam (Postrainy season) (Iypasi – Karthigai) (Oct 16 – Dec 15)	Vatham (--) Pitham ↑↑ Kabam (--)	Restitution Ectopic escalation Restitution
3. MunpaniKaalam (Winter season) (Markazhi – Thai) (Dec 16 – Feb 15)	Vatham (--) Pitham (--) Kabam (--)	Restitution Restitution Restitution
4. Pinpani Kaalam (Post winter) (Masi – Panguni) (Feb 16 – Apr 15)	Vatham (--) Pitham (--) Kabam ↑	Restitution Restitution Insitu escalation
5. Elavenir Kaalam (Summer) (Chithirai–Vaikasi) (Apr 16 – Jun 15)	Vatham (--) Pitham (--) Kabam ↑↑	Restitution Restitution Ectopic escalation

6. MudhuvenirKaalam (Post summer) (Aani – Aadi) (Jun 16 – Aug 15)	Vatham ↑ Kabam (--)	Insitu escalation Restitution
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5.THINAI

S. NO	THINAI	LAND	HUMORS
1.	Kurinchi	Mountain and its surroundings Hilly terrain	Kabam
2.	Mullai	Forest and its surroundings Forest ranges	Pitham
3.	Marutham	Farm land and its surroundings Cultivable lands	All three humors are in equilibrium
4.	Neithal	Sea shore and its adjoining areas, Coastal belt	Vatham
5.	Palai	Desert and its surroundings Arid zone	All three humors are affected.

6. Alteration in Reflexes (14 Vegangal)

There are 14 natural reflexes involved in the physiology of normal human beings. If willfully restrained or suppressed, the following are resulted.

1. Vatham (Flatus)

This urge should not be suppressed. If it is suppressed it leads to chest pain, epigastric pain. Abdominal pain, ache, constipation, dysuria and indigestion predominate.

2. Thummal (Sneezing)

If restrained, it leads to headache, facial pain, low back pain and neuritic pain in the sense organs.

3. Siruneer (urine)

If restrained, it leads to urinary retention, urethral ulcer, joint pain, pain in the penis, gas formation in abdomen.

4. Malam (Faeces)

If restrained, it leads to pain in the knee joints, headache, general weakness, flatulence and other diseases may also originate.

5. Kottavi (Yawning)

If restrained, it leads to indigestion, leucorrhoea, and abdominal disorders.

6. Pasi (Hunger)

If restrained, it leads to the tiredness of all organs, emaciation, syncope, apathetic face and joint pain.

7. Neer vetkai (thirst)

If restrained, it leads to the affection of all organs and pain may supervene.

8. Kaasam (Cough)

If it is restrained, severe cough, bad breath and heart diseases will be resulted.

9. Ilaippu (Exhaustiveness)

If restrained, it will lead to fainting, urinary disorders and rigor.

10. Nithirai (Sleep)

All organs will get rest only during sleep. So it should not be avoided. If disturbed it will lead to headache, pain in the eyes, deafness and slurred speech.

11. Vaanthi (Vomiting)

If restrained, it leads to itching and symptoms of increased Pitham.

12. Kanneer (Tears)

If it is restrained, it will lead to Sinusitis, headache, eye diseases and Chest pain.

13. Sukkilam (Semen)

If it is restrained, there will be joint pain, difficulty in urination, fever and chest pain.

14. Swaasam (Breathing)

If it is restrained, there will be cough, abdominal discomfort and Anorexia.

The Diagnostic methodology in Siddha system is unique as it is made purely on the basis of clinical acumen of the physician. The diagnosis is arrived from,

- Poriyal arithal and Pulanal arithal (examination of sense organs)
- Vinaathal (Interrogation)
- Envagai thervu (eight fold examination)
- Manikkadai nool (wrist circumference sign)
- Sothidam (astrology)
- Assessment of deranged three dosham (humours), Udal thathukal and 96 principles.

3.C.1 PORIYAL ARIDHAL

The physician should examine the patient's porigal by his porigal.

1. Mei - To feel all types of sensation
2. Vaai - For knowing taste
3. Kan - For vision
4. Mooku - For knowing the smell
5. Sevi - For hearing

3.C.2 PULANAL ARITHAL

The physician should examine the patient's pulangal by his porigal & Pulangal

1. Hearing - Ear
2. Vision - Eye
3. Taste - Tongue
4. Sensation - Skin
5. Smell - Nose

VINAADHAL (INTERROGATION)

The physician should interrogate the patient's name, age, occupation, native place, Socio – economic status, dietary habits, present complaints, history of present illness, aggravating factors, history of previous illness.

3.C. 3 ENVAGAI THERVUGAL

“அகத்துறு நோயை கரத்தாம லகம்போல்
பகுத்தறிவீர் நாடிப் பரிசம் - தொகுத்த நிறம்
கட்டுவகைச் சொல்மொழிக்ண் கண்ட மல மூத்திரம் நா
எட்டுவகை யாலு மறிவீர்”

- அகத்தியர் வைத்திய சிந்தாமனி வெண்பா - 4000

According to Agathiyar Vaithiya Sinthaamani Venba – 4000, the Envagaithervu Includes Naadi (Pulse) Naa (Tongue), Niram (Color), Mozhi (Voice), Vizhi (Eyes), Malam (Faeces), Neer (Urine) and Sparisam (Touch & palpation).

"நாடி பரிசம் நாநிறம் மொழிவிழி
மலம் மூத்திரம் மருத்துவராயுதம்"

-தேரையர்.

"மெய்குறி நிறந்தொனி விழிநாவிருமலம் கைக்குறி"

-தேரையர்.

As per Saint Therayar, the eight methods of diagnosis are Naadi (Pulse) Naa (Tongue), Niram (Color), Mozhi (Voice), Vizhi (Eyes), Malam (Faeces), Neer (Urine) and Sparisam (Touch & palpation).

பதினெண் சித்தர் நாடி சாத்திரம்

"பாரீர்நாடி யறிந்து உணர்ந்து பரமன் செயலும் பிணிமுறையும்
நீரேயோடு மலசலமும் நிறமுங் குணமு முகக்குறியும்
சாரே யிணங்குங்குழல் மடவீர்காலன் நேகம் வயதிளமை
தேரேயறியுமுகநாடி நெறிங்குறியுஞ் செறியுஞ் சொல்வோமே"

-பதினெண் சித்தர் நாடி சாத்திரம்

As per Sage Agathiyar, Naadi (pulse), Malam (stools), Salam (urine), Niram (complexion), Gunam (character), MugaKuri (facies), Thegam (constitution), Vayadhu (age), Elamai are the diagnostic tools.

"தொகுக்கலுற்ற அட்டவிதப் பரீட்சை தன்னை
துலக்கமுரும் பண்டிதரே தெளிவதாகப்
பகுக்கரிய நாடியை நீ பிடித்துப் பாரு
பகர்கின்ற வார்தையைப்பார் நாவைப்பாரு
வகுக்கரிய தேகமதைத் தொட்டுப்பாரு
வளமான சரீரத்தின் நிறத்தைப் பாரு

சகிக்கரிய மலத்தைப்பார் சலத்தைப் பாரு
சார்ந்தவிழி தனைப்பார்த்துத் தெளிவாய்க் கானே"

-கண்ணுசாமிப்பரம்பரை வைத்தியம்

According to literature KannuSaami Paramparai Vaithiyam, Naadi, Naa, Thegam, Thodu unarvu, Niram, Malam, Salam and Vizhi are the diagnostic tools.

அகத்தியர் வைத்திய ரத்தின சுருக்கம்

"நாடியால் முன்னோர் சொன்ன நற்குறிகுணங்களாகும்
நீடிய விழியினாலும் நின்ற நாட்குறிப்பினாலும்
வாடிய மேனியாலும் மலமோடு நீரினாலுஞ்
சூடிய வியாதி தன்னைச் சும் பெற வறிந்து சொல்லே"

According to Agathiyar Vaithiya Rathina Surukkam, the diagnostic tools are Naadi (Pulse), Vizhi (Eyes), Kurigunam (Signs), Nalkurippu (Chronology), Maeni (Constitution), Malam (Stools) And Neer (Urine).

பரிபூரண நாடி

"அட்டமாங்கிரிகடன்னை யறிந்து நீயுணரவேண்டில்
வட்டமாமுகங்கள்பல்லும் வாயதில்நாக்குங்காயங்
கட்டருமலங்கள் கைதனில்நாடிதானுந்
திட்டமாயறிந்துசெய்யுந் திறமுள்ளவயித்தியராமே"

According to the Paripoorana Naadi, the diagnostic parameters are Mugam (Facies), Pal (Teeth), Vai (Mouth), Naakku (Tongue), Kaayam, Irumalam, Naadi (Pulse).

தன்வந்திரி பகவான்

"திருமறை முனிவன் கூறும் வாகடச் செய்கைதன்னில்
வருபல வியாதியான வகையறி குவதே தென்னில்
உருவுறு நாடி யாலு மொண்முக மலநீ ராலும்
தெரிவிழி நாவினாலுந் தந்தலக் கணத்தி னாலும்"

-தன்வந்திரி (ப.சி.நாடி சாத்திரம்)

According to Dhanvantri Vaithiyam, the diagnostic parameters are Naadi (Pulse), Mugam (Facies), Malam (Stools), Neer (Urine), Udal (Constitution), Vizhi (Eyes), Naa (Tongue), Pal (Teeth).

பதினெண் சித்தர் நாடி சாத்திரம்

"திரணியதோர் நாடிகண்கள் சத்தத்தோடு
தேகத்தின் துபரிசம் வானம் நாக்கு

இரணமலம் இவைகளெட்டும் இதம்படவே
தான்பார்த்துக் குறிப்புங் கண்டு
பரனருளாற் பெரியோர்கட்பாதம் போற்றிப்
பண்புதவறாமற் பண்டிதன்ஞ் யெய்வீரே"

-பதினெண் சித்தர் நாடி சாத்திரம்

According to the above literature, the diagnostic tools are Naadi (Pulse), Kan (Eyes), Sattham (Voice), Thegam (Constitution), Sparisam and Naa (Tongue).

1.TONGUE EXAMINATION (நாத்தேர்வு)

“முள்ளாய் வெடித்து கருத்தான் முன்பின் வெளுத்து
தள்ளாநீ ருண்டோ சேர்ந்தால் பசந்தால் - எல்லாம்
நடுவாம் பலபலவாம் நற்சன்னி முன்னோய்
ஒடுநீரில் நாவினநோது.”

-அகத்தியர் வைத்திய சிந்தாமனி வெண்பா - 4000

As per Agathiyar Vaithiya Sinthaamani Venba – 4000, fissured and black tongue represent vitiated Vatha humor, pallor represents Kabam , green colour represents Pitha humor and mixed appearance of these features resembles Sanni noi.

“பலமான ருசியறியும் நாவின கூற்றைப்
பகர்கின்றேன் வாதரோகி யின்றன் நாவு
கலமாக வெடித்து கறுத்திருக்கு முட்போல்
கண்டு கொள்வாய் பித்தரோகியின்றன் நாவு
நலமுற சிவந்து பச்சென்றிருக்கும் நட்பிலா
சிலேத்துமரோகி யின்றன் நாவு
தலமதனிலுற்றமுதி யோர்கள் சொன்ன
தன்மையடி தடித்து வெளுத்திருக்கும்பாரே”

-கண்ணுசாமி பரம்பரை வைத்தியம்

In Vali derangement, tongue will be cold, rough, furrowed and tastes pungent. In Azhal, it will be red or yellow and kaippu taste will be sensed. In Iyyam, it is pale, sticky and sweet taste will be lingering. In depletion of Thontham, tongue will be dark with raised papillae and dryness.

Examination of tongue also includes the salivary examination. The following stanza describes salivary examination

“எச்சிற் பரிவாயிளநீர்பால் வெண்ணெயனை
யெச்சிற் பரிவா யிலகுநுரை - யெச்சிற்
கனியடைமா நன்றுமுதற் நண்ணான்கு முன்னிக்
கனியடைமா மேவுபிட கா.”

-சிகிச்சாரத்ன தீபம்

2. EXAMINATION OF COMPLEXION (உடல் நிறத் தேர்வு)

“உரைத்தகற்ப் பான்வாத ரோகிபித்த ரோகி
அரைத்தமஞ்ச னைக்குளித்தோன் ஆவான் - இரத்தம்
குளித்தவனு மாவான் கொடும்சிலேத்தும ரோகி
வெளுத்திடுவான் தொந்தரோகியெ..”

-அகத்தியர் வைத்திய சிந்தாமனி வெண்பா - 4000

“மூன்றாகும் வாதபித்த சிலேத்து மத்தால்
மிகுந்தமுறத் தொந்தித்த ரோகி தேகம்
தோன்றாத சீதய வுஷ்ணங் காலமூன்றுந்
தொகுத்தேன்யான் திரேகத்தி னிறத்தைக் கேளு
ஊன்றாத வாதவுடல் கறுத்துக் காணும்
ஊரியபித்த முடல் சிவப்புப் பசுமைகாணும்
போன்றாத வையவுடல் வெண்மை தோன்றும்
பொருந்துந்தொந்த ரோகவுடற் கிவற்றை யொக்கும்”

-கண்ணுசாமி பரம்பரை வைத்தியம்

“பனைவாத தேகநிறங் கறுத்து நிற்கும்
பைத்தியதேக நிறமஞ்சள் சிவப்பதாமே
தாமே சிலேட்டு மதேகநிறம் வெளுப்பு தான்
தொந்தேகம் இந்நால் விதமாயநிற்கும்”

-தன்வந்திரி (பதினெண் சித்தர் நாடி சாத்திரம்)

In Vali, Azhal and Iyyam vitiations, the colour of the body will be dark, yellow or red and fair respectively.

3. VOICE EXAMINATION (ஒலித் தேர்வு)

“பலரோகி வார்த்தைப் பலவிதமாம் வாதத்
தலைரோகி வார்த்தைச் சமமாகும் - நிலைகடந்த
பித்தரோ கிக்குடயர்ந்த பேச்சுண்டாம் ச்லேட்டுமந்தான்
சத்தம்ஈ னச்சுரமாம் தான்.”

-அகத்தியர் வைத்திய சிந்தாமனி வெண்பா - 4000

“பார்ப்பதான் வாதரோகி யின்றன் வார்த்தை
பக்குவமாய்ச் சமசத்த மாயிருக்கும்
சேர்ப்பதுதான் பித்தரோகியின்றன் வார்த்தை
செப்பக்கோள பெலத்துமே யுறத்திருக்கும்
ஏற்பதுதான் ஐயரோகி யின்றன் வார்த்தை
யெளிதாகச் சிறுத்திருக்குமியல்பிதாகும்
கேசற்கவே யிம்மூன்றுந் தொந்தமாகில்
கூசாமற் பலவிதமாய் பேசுவாரே“

- கண்ணுசாமி பரம்பரை வைத்தியம்

“மாமயிலே சத்தமது அறிய வேண்டில்
வாதரோகிசம தொனியாய் வார்த்தை பேசும்
ஈமமுள்ள பித்தந்தான் இறைந்த கூறும்
இயம்பிடும் சிலேத்தும ரோகிக்கீனசத்தம்
நாமுரைத்தோம் தொந்த ரோகிக்குத் தானிந்த
நால்விதமாய் மொழிந்த சத்தம் நயந்து காணே“

-பதினெண் சித்தர் நாடி சாத்திரம்

In vitiation of Vali, Azhal and Iyyam, the voice would be normal, high pitched and shrill or low pitched respectively. By the voice, the strength of the body can be assessed.

4. THE EYE EXAMINATION (கண் தேர்வு)

“கண்கறுத்து நீரோடில் காலாம் நடுவாகில்
கண்பசக்கும் சொக்கும் கடையாகில் - கண்பீளை
சாடி வெளுக்குமே சன்னிவாதம் பித்தமுமென்
றோடியகா மாலை பசக்கும்”

-அகத்தியர் வைத்திய சிந்தாமனி வெண்பா - 4000

As per Agathiyar Vaithiya Sinthaamani Venba – 4000, in vitiated Vali eyes turn black and tears shed. In vitiated Azhal humour , mukkutram and in jaundice yellowish discoloration occurs. In vitiated Iyyam, the eyes turn white.

“ உண்மையாய் கண்கள்குறிப் பதைக்கேள் வாதம்
உற்றவிழி கறுத்துநொந்து நீருங் காணும்
தண்மையிலாப் பித்தரோகி யின்றன் கண்கள்
சார்பாகப் பசுமைசிவப் பேறுங் காணும்
வண்மையிலா வையரோகி விழிகள் தானும்
வளமான வெண்மைநிற மேதா நாதம்
திண்மையிலாத் தொந்தரோகி யின்றன் கண்கள்
தீட்டுவாய் பலநிறமென் றறைய லாமே”

-கண்ணுசாமி பரம்பரை வைத்தியம்

“காணுகின்ற வாத ரோகிக்கு கண்கள்
கருநிறமாய் நொந்துமிகத் தண்ணீர்பாயும்
பூணுகின்ற பித்தரோகிகடி மஞ்சள் போலிருக்கம்
சிவப்பு நிறப்பொலிவு தோன்றும்”

-பதினெண் சித்தர் நாடி சாத்திரம்

In Vali disease, the tears is darkened, in Azhal disease they are yellow, in Iyya disease they are whitish in colour and in Thontha disease the tears are multi coloured. In Vali disease there will be excessive tears (epiphora). In disturbance of all the three humuors, eyes would be inflamed and reddish.

5. FAECES EXAMINATION (மல தேர்வு)

“கறுத்தமல பந்தமலங் காலாகும் பித்தம்
சிறுத்தமுட் டிணம்செம்மை சேரும் - பொறுத்தொருக்கால்
சீதமலந் தில்லையுமாம் சேர்ந்தபல ரோகியாம்
மீதமலம் எண்ணிறமு மே.”

- அகத்தியர் வைத்திய சிந்தாமனி வெண்பா - 4000

As per Agathiyar Vaithiya Sinthaamani Venba – 4000, in vitiated Vali, the stool is hard and black. In vitiated Azhal, it is hot and red. In vitiated Iyyam it is cool and watery.

“ ஒக்குமே வாத நோய் மலத்தைப் பார்க்கில்
உகந்தமலம் கறுகியே கறுத்திருக்கும்
மிக்கபித்த நோய்மலத்தை யுற்றுப் பார்க்கில்
மிகுந்தசிவப்புடன் பசுமை தானுந் தோற்றும்
மைக்குவளை மனேகே னைய ரோகம்
மலமதுதான் வெண்மைனிற மாயிருக்கும்
பக்குவமா யிம்மூன்றுந் தொந்திப் பாகில்
பகருமின் நிறங்கள்வகை பரிந்து காணும்“

-கண்ணுசாமி பரம்பரை வைத்தியம்.

In excacerbated Vali, faeces is hard, dry and black in colour. In Azhal vitiation, it is yellow. In Iyyam, disturbance it is pale.

6. URINE EXAMINATION (நீர் தேர்வு)

“வாதரோ கம்தெளிந்தான் மஞ்சளித்தான் மற்றையது
சீதனுரைத் தார்பலவாம் சேளந்தநோய் - கோதகலா
மூத்திரத்தின் உண்மை மொழிந்தோம் இனிச் சொல்வாம்
நாத்திரத்தின் உள்ளவகை நாம்.”

-அகத்தியர் வைத்திய சிந்தாமனி வெண்பா - 4000

“ ஓங்கிய வாதத்தோர்க்கு நீர்விழுங் குணந்தா நுரைக்கிற
 பூங்கொடி கறுத்துநொந்து சிறுத்துடன் பொருமி வீழும்
 பாங்குடன் பித்தத்தோர்க்கும் பசியநீர் சிவந்து காட்டி
 ஏங்கவே கறுக்கதாக எரித்துடன் கடுத்து வீழும்
 வீழுமே சிலேற்பனத்தோர் நீர்க்குணம் விளம்பக் கேளாய்
 நாளுமே வெளத்துறைந்து நலம்பெற வீழுங் கண்டாய்
 வாள்விழி மானேதொந்த ரோகமா னிடர்க்குத் தானே
 தாளுநீர் பலநிறந்தா னெனவே சாற்றி னோமே”

-கண்ணுசாமி பரம்பரை வைத்தியம்

‘Neer’ refers to Urine ‘Kuri’ refers to Sign. Theraiyar, one of the renowned authors of Siddha medicine described urine examination and stages of health. He had explained about the colour and consistency of the urine in vitiated humor and disease. He also emphasised the spreading nature of a single drop of oil on the surface of the urine indicating the imbalance of specific dosha and prognosis of disease. Normal urine is straw coloured and odourless. The time of the day and food taken will have an impact on the colour of the urine.

COLOUR OF URINE

- Yellow colour – similar to straw soaked water – indigestion
- Lemon colour – good digestion
- Reddish yellow – heat in body
- Colour similar to flame of forest red or flame coloured excessive heat
- Colour of saffron – extreme heat

“மாணிக்கம் பால்பிரச மஞ்ச ளிஃதுயிர
 மாணிக்கம் பால்வரிசை மாறாநீர் - மாணிக்க
 முத்தம் மாதிரி யொருநாலு மந்தமுனே
 யுத்தம் மாதிரி யுன்.”

-சிகிச்சாரத்ந தீபம்

As per Sikicharathna Theepam,

COLOUR OF URINE

- Ruby red or milky white
- Honey
- Golden yellow

- PROGNOSIS

- Poor
- Slow and take long time
- Good

NEIKKURI (நெய்க்குறி)

“ அருந்து மாறிதமும் அவிரோதமதாய்
அஃகல் அலர்தல் அகாலவூன்தவிர்ந்தழற்
குற்றள வருந்தி உறங்கி வைகறை
ஆடிகலசத் தாவியே காதுபெய்
தொரு முகூர்த்தகலைக்குட்படு நீரின்
நிறக்குறி நெய்க்குறி நிருமித்தல் கடனே”

“ அரவென நீண்டினஃகே வாதம்
ஆழிபோல் பரவின் அஃதே பித்தம்
முத்தொத்து நிற்கின் மொழிவதன் கபமே”

-அகத்தியர் வைத்திய ரத்தின சுருக்கம்

The spreading pattern of oil drop is the indicative of Vali, Azhal and Iyyam diseases e.g

1. Aravu (Snake Pattern of spread) indicates Vali disease
2. Mothiram (Ring Pattern of spread) indicates Azhal disease
3. Muthu (Pearl Pattern of spread) indicates Iyya disease

In Neikkuri, the rapid spread of oil drop; Pearl beaded and Sieve type of spreading pattern indicates incurable state of the disease. From this, we can assess the prognosis by the Neikkuri.

“இலகுமா மூத்தி ரத்தி லெண்ணெயை விட்டுப் பார்க்கில்
கலக்கஞ் செய் வாதத் தோர்க்குக் காணவே நீள மாய்ப்போம்
பிலனுறு மெய்யை வாட்டும் பித்தமே சிதறிக் காட்டும்.

சாற்றிய கபந் தனக்குச் சல்லடைக் கண்போல் காணும்
தேற்றிய திரிதோ டந்தான் சொல்மூன்று குணமுங் காட்டும்
வேற்றொரு துளியாய் நின்றால் வெகுதாம் சாத்தியந்தான்

ஆற்றிமெள் ளப்ப டர்ந்தா வதுசுக சாத்ய மாமே
 ரினி லமுந்திப் போனால் நிகழ்ந்திடு மசாத்தியந்தான்
 வாரிடு முளையாய் கேளாய் வளைய பாத்திரத்தி லேனும்
 பாரினில் குயவன் செய்மண் பாத்திரந் தனிலா னாலும்
 சாரவே பிடித்து வெய்யிற் றனில்வைத்துப் பார்ப்பாய்தானே.“

- தேரையர் விருத்தம்

- சிகிச்சாரத்ந தீபம்

SPREADING PATTERN OF OIL	-	INTERVENTION
Lengthening	-	Vali
Splits	-	Azhal
Sieve	-	Iyyam
Stands as a drop	-	Poor prognosis
Slowly spreads	-	Good prognosis
Drop immerses into the urine	-	Incurable disease

6. TOUCH (தொடு உணர்வு)

“வெம்மை குறைந்தாலு மிகுந்தாலும் வாதபித்தம்
 தம்மை நிரைநிரையாய்ச் சாற்றுவார்- வெம்மையன்றி
 சீதமும்அவ் வாறாகில் சிலேட்டும மொன்றுதொந்த
 மீதமும்அவ் வாறாகு மேல்.“

-அகத்தியர் வைத்திய சிந்தாமணி வெண்பா - 4000

“நேயமுடனே வாதத்தின் தேசந்தானும்

நேர்மையாய்க் குளிர்ந்து சில விடத்திலே தான்

மாயமுட னுட்டணமுந் துடிதுடிப்பு

மருவுதலாம் பித்தத்தின் தேசந் தானும்

தோயவே வுட்ணமதா யிருக்குந் தெளிவாய்

சேத்துமத்தின் தேசமது குளிர்ந்திருக்கும்

பாய தொந்த தேசமது பலவாறாகும்

பரிந்து தொட்டுத் தேசத்தைப் பார்த்துப் பேசே“

-கண்ணுசாமி பரம்பரை வைத்தியம்

In Vali disease, some regions of the body felt chill and in some areas they are hot. In Azhal disease, we can feel heat. In Iyya disease, chillness can be felt. In Thontham diseases, we can feel altered sensations.

8. NAADI (நாடி)

The 'Pulse Diagnosis' is a unique method in Siddha Medicine. The pulse should be examined in the Right hand for male and the left hand for female. The pulse can be recorded at the radial artery. By keenly observing the pulsation, the diagnosis of disease as well as its prognosis can be assessed clearly.

Naadi is nothing but the manifestation of the vital energy that sustains the life within our body. Naadi plays an most important role in Envagai thervu and it has been considered as foremost thing in assessing the prognosis and diagnosis of various diseases. Any variation that occurs in the three humors is reflected in the Naadi. These three humors organize, regularize and integrate basic functions of the human body. So, Naadi serves as a good indicator of all ailments.

நாடி பார்க்கும் வகை

“இடுமென்ற நாடிகள்பார்க்கும் வகையைக் கேளு
என்னவென்றால் நடுவிரல் நீவிப்பின்னே
அடுமென்ற அடுத்தவிரல் மோதிரமாம் விரலை
அப்பனே இளுத்தபின்பு சுண்டுவிரலிளுத்து
உடுமென்ற தூண்டுவிர லிளுத்து அப்பால்
உத்ததொரு அங்குட்ட விரலைநீ விக்கரத்தில்

படுமென்ற சீயோதி அங்குலமோ தள்ளி
பார்தடவி மூன்றுதரம் சுரம்பார்க்கும் வகையே
வகை என்ன வாதமது ஒண்ணைரையாம் பித்தம்
வளமையொன்று அய்யங்கால் வளமாய்நிற்கில்
பகையில்லை நாடிகளுந் தொந்த மில்லை
பண்பான் சுகரொசருநுபக் கூறுசொன்னேன்“

-அகத்தியர் கனகமணி100

Naadi is felt by,

Vali	-	Tip of index finger
Azhal	-	Tip of middle finger
Iyyam	-	Tip of ring finger

மூவகையும் மாத்திரை அளவும்

“வழங்கிய வாதம் மாத்திரை ஒன்றாகில்
வழங்கிய பித்தம் தன்னில் அரைவாசி
அழங்கும் கபந்தான் அடங்கியே காலோடில்
பிழங்கிய சீவற்குப் பிசுகொன்று மில்லையே”

-நோய் நாடல் முதல் பாகம்

The pulse is measured in wheat/grain expansive heights. The normal unit of pulse diagnosis is 1 for Vali (Vatham), ½ for Azhal (Pitham) and ¼ for Iyyam (Kabam).

THE PULSE PLAY

Compared to the gait of various animals, reptiles and birds,

“வாகிலன்னங் கோழி மயிலென நடக்கும் வாதம்
ஏகிய வாமையட்டை யிவையென நடக்கும் பித்தம்
போகிய தவளை பாம்பு போலவாம் சேத்துமந்தான்”

-நோய் நாடல் முதல் பாகம்

Vali - Movement of Swan and Peacock

Azhal - Movement of Tortoise and Leech

Iyyam - Movement of Frog and Serpent.

“பார்க்கையில் கைவிகாரம் பார்த்தா லாடவர்க்கு
எற்கும் வலக்கை இடக்கை - மடவார்க் காகு”

-அகத்தியர் வைத்திய சிந்தாமணி வெண்பா - 4000

Naadi is examined in right side for men and on the left side for women.

MANIKADAI NOOL (Wrist circumetric sign)

Agathiya soodamanikayaru ..

“கமலக்கை மணிக்கையில் கயறு சூத்திரம்
விமலனே நோக்கியே வேடமாமுனி

திமிலாம் பிணியது சேர்ச் செப்பியே
அமலனாமுனிக்கு முன்னருளிச் செய்ததே“

-பதினெண் சித்தர் நாடிநூல்

According to the Pathinen Siddhar Naadinool, Manikadainool is also helpful in diagnosis. This manikkadai nool is a parameter to diagnose the disease by measuring the circumference of the wrist by means of a thread and then dividing the measured circumference with the patient's fingers. By this measurement the disease can be diagnosed.

When the Manikkadai nool is 11 fbs, the person will be stout and he will live a healthy life for many years. When the Manikkadai nool measures between 4 to 6, it indicates poor prognosis of disease and the severity of the illness will be high and it leads to death.

MANIKKADAI NOOL - INFERENCE

10 fbs	-	Pricking pain in chest and limbs, gastritis and ulcer result.
9 ¾ fb	-	Fissure, dryness and cough will be resulted.
9 ½ fbs	-	Odema, increased body heat, burning sensation of eye, fever, Mega noi and anorexia.
9 ¼ fbs	-	Dysuria, insomnia ,sinusitis and burning sensation of eye.
9 fbs	-	Impaired hearing, pain around waist, thigh pain, unable to walk.
8 ¾ fbs	-	Increased body heat, skin disease due to toxins, abdominal discomfort, cataract, sinusitis.
8 ½ fbs	-	Leucorrhoea, venereal disorder and Infertility will occur..
8 ¼ fbs	-	Stout and painful body. Headache. Sinusitis and toxins induced cough.
8 fbs	-	Abdominal discomfort, gastritis, anorexia and venereal diseases.
7 ¾ fbs	-	Piles, burning sensation of limbs, headache, numbness occur. Within 2 years cervical adenitis and epistaxis results.
7 ½ fbs	-	Osteoporosis, abdominal discomfort, burning sensation of eyes, increased body temperature. Within 6 days all the joints of the limbs presents a swelling.

7 ¼ fbs	- Lumbar pain, increased pitha in head, anemia, eye pain, odema and somnolence
7 fbs	- Pitham ascends to head, haemetemesis, phlegm, burning sensation of limbs and constipation.
6 ¾ fbs	- Eye ache, dizziness, testis disorder. Within 3 years it causes anuria, pain and burning sensation over limbs, facial sweating results.
6 ½ fbs	- Thirst, anorexia, increased body heat and vatham results.
6 ¼ fbs	- Diarrhoea, belching, vomiting and mucous dysentery
6 fbs	- Reduced weight, phlegm in chest. It results in death within 20 days.
5 ¾ fbs	- Delirium, dizziness, loss of consciousness . It results in death even if the patient takes gruel diet
5 ½ fbs	- Severity of illness is increased. Toxins spread to the head. Tooth darkens. Patient will die in 10 days.
5 ¼ fbs	- Patient seems to be sleepy and death results on the next day.
5 fbs and	- Pallor and dryness of the body. Kabam engorges the throat the person will die.
4 ¾ fbs	- Dryness of tongue and tremor present. Patient will die in 7 days.
4 ½ fbs	- Shrunken eyes, odema will present and death results in 9 days.
4 ¼ fbs	- Tremor, weakness of limbs and darkening of face occurs. Finally death results in two days.
4 fbs	- Pedal odema will be present. Patient will die in 5 days.

3.A.9. THE ASTROLOGY

Macrocosm and Microcosm

Man is said to be Microcosm, and the Universe is Macrocosm; since what exist in the Universe exists in the human body too. Man is being an integral part of universal nature. The forces prevailing in the microcosm (Human body) are analogous with that of the forces prevailing in the macrocosm (Universe). The natural forces acting in and through various organs of the body

are intimately related to or similar to or correspond to the forces acting in and through the organisms of the world.

This closely follows the Siddhar's doctrine,

“அண்டத்திலுள்ளதே பிண்டம்
பிண்டத்திலுள்ளதே அண்டம்
அண்டமும் பிண்டமு மொன்றே
அறிந்து தான் பார்க்கும் போதே”

- சட்டமுனி

Astral influences:

All the influences which are radiated from the sun, planets and that of the stars can act upon the human bodies. Moon exercises a very bad impact on the disease in general especially during the period of new moon. For instance, paralysis, brain affections, dropsy, and stimulation of sexual perversions are resulted during the newmoon. Mars causes anemia and lack of nervous vigour. A conjugation of the moon with other planets such as Venus, mars, etc may make its influence still more injurious.

The 8th place forms the laghanam which deals about ones age, chronic diseases, death etc. In the organisms of man, these forces may act in an abnormal manner and cause disease. Similarly, in the great organism of the cosmos, they act abnormally likewise and bring about disease on earth and its atmospheric condition like earthquake, storms etc. The Mars invisibly influences human's blood constituents. The Venus instigates intersexual love.

The following are the instances in which every sign of the zodiac acts towards some particular parts of the body.

1. According to T.V.S. Dictionary:

- | | |
|---------------|---|
| • Aries | - Neck |
| • Taurus | - Neck and shoulder |
| • Gemini | - Arms and hands |
| • Cancer | - Chest and adjacent parts. |
| • Leo | - The heart and stomach |
| • Virgo | - The intestines, base of stomach and umbilicus |
| • Libra | - Kidney |
| • Scorpio | - Genitals |
| • Sagittarius | - Lips |

- Capricorns - Knees
- Aquarius - Legs
- Pisces - Feet

2. According to literature Thiruvalluvar periyā sunthara sekaram.

- 1) Mesham - Head
- 2) Rishabam - Face
- 3) Mithunam - Neck
- 4) Kadagam - Shoulders
- 5) Simmam - Chest
- 6) Kanni - Side of body
- 7) Thulaam - Back, stomach
- 8) Virutchigam - Testicles
- 9) Thanusu - Thigh
- 10) Magaram - Knees
- 11) Kumbam - Heel
- 12) Meenam - Foot.

4.A.10. The Impact of the Planets on the Human Organs

According to the literature Siddha Maruthuvanga Surukkam

Each of these planets hold jurisdiction over some parts of the body similar to the signs of the Zodiac. The planets exercise special power over some parts of the body resulting in a disease or diseases in accordance with their impacts on the three basic humors in the system.

1. Sani (Saturn)

It exhibits supremacy over the bones, tooth, cartilages, ear, spleen, bladder and brain and gives rise to fever, leprosy, paralysis, dropsy, cancer, cough, asthma, deafness of the right ear, hernia etc.

2. Guru (Jupiter)

It holds jurisdiction over the blood, liver, pulmonary veins, diaphragm, Muscles of the trunk and sense of touch & smell.

3. Sevvaai (Mars)

It has got power over the bile, gall bladder, left ear, pudendum, kidneys, fever, jaundice, convulsions, hemorrhage, carbuncle, erysipelas, ulcer etc.

4. Sukkiran (Venus)

It exercises its impact on the blood and semen, throat, breast, abdomen, uterus, genitalia, taste, smell, pleasurable sensation, gonorrhea, barrenness, Abscesses or even death from sexual passions or from poison.

5. Pudhan (Mercury)

It holds jurisdiction over the animal, spirit, also over legs, feet, hands, fingers, tongue, nerves and ligaments and produces fevers mania, phrenitis, epilepsy, convulsion, profuse expectoration or even death by poison, witchcraft and so on.

Planets	Organs of impact
1. Solar force	Heart
2. Lunar force	Brain
3. Mars	Gall Bladder
4. Mercury	Kidney
5. Venus	Lungs
6. Jupiter	Liver
7. Saturn	Spleen

5. According to literature Thiruvalluvar Periya Sunthara Sekaram.

- | | | |
|--------------|---|---------------------------|
| 1. Sooriyan | - | Head |
| 2. Santhiran | - | Face |
| 3. Sevvai | - | Chest |
| 4. Puthan | - | Center of Posterior Trunk |
| 5. Guru | - | Stomach |
| 6. Sukkiran | - | Groin, Genitalia |
| 7. Sani | - | Thigh |
| 8. Raagu | - | Hands |
| 9. Kedhu | - | Legs |

Each of these rasis and the organs of impact as well as the Girahams are found to be related with the resultant diseases of corresponding organs. Therefore, the human body is impregnated with the vital forces that could be acted upon by the astronomical bodies in the sky. With the augmented spiritual force, a sage is able to get control over the above said planets. All the others are under the influence of the forces exhibited by these asteroids.

REVIEW OF LITERATURE - NEERKKURI, NEIKKURI...

neerkkuri neikkuri

- Manthara Kaasam



4. REVIEW OF LITERATURE – NEERKKURI NEIKKURI (OIL ON URINE SIGN) OF MANTHAARA KAASAM

4.A. நீர்க்குறி

கடவுள் வணக்கம்

ஒரு திருப்பிரணவத் துதித்தகாரிய
ஓத்தின் முன் மொழிக்குரையுரைத்தவாரியனை
கருணையினு தவியகவுரி தன்பாக
கருதரும் பெரும் பெயர் கடவுடனாக
நிறப்பது மச்சரணைஞ்சிலிருத்
நிறக்குறியியலினை நிலவப்புகல்வொம்.

-தேரையர் தைல வார்க்க சுருக்கம்

Lord Vinayaga who developed from the Pranava manthiram ‘omm’, Lord Muruga, Lord Shiva and Parvathy should be meditated before determining the Neerkkuri and Neikkuri, which was emphasized by Sage Theraiyar in his book of Theraiyar Thylavarka surukkam.

4.A.1. நீர்க்குறி

தர்க்கசாத் திரிக ளானோர் தங்களிற் றேர்ந்து நோயின்
வர்க்கமா நாடி தன்னா லறிவது மயக்க மென்றே
உற்றநீர்ப் பரீட்சை யாய்ந்தே யுணர்த்தின ரிதற்கு நேராய்
மற்றொரு விதிநூலில்லை மருத்துவக் கலைவல் லோர்க்கே.

-அங்காதி பாதம்

In order to shed off the ambiguity in the diagnosis of disease through pulse perception. The exponents have charted out a method called Neerkuri - an incomparable method of diagnosis.

4.A.2. நிறக்குறி நெய்க்குறி நிச்சத்தற்குரிய நீர் இலக்கணம்:

“அருந்துமாறிரதமும் அவிரோதமதாய்
அஃகல் அலர்தல் அகாலவூன் தவிர்ந்தழற்

குற்றளவருந்தி உறங்கி வைகறை
ஆடிக்கலசத் தாவியே காது பெய்
தொருமுகூர்த்தக் கலைக்குட்படு நீரின்
நிறக்குறி நெய்க்குறி நிருமித்தல் கடனே”

-தேரையர் நீர்க்குறி நெய்க்குறி வைத்தியம்

On the day before the urine test one should take food, consisting of all the six tastes in an harmonious blend at the regular time based on one's digestive fire (Appetite), after a sound overnight sleep, Urine should be collected in a crystal bowl and the test should be done before 90 minutes from dawn.

4.A.3. நீரின் பொதுக்குணம் - General features of urine:

“வந்த நீர்க்கரி எடை மணம் நுரை எஞ்சலென்
றைந்தியலுளவவை யறைகுது முறையே”

The following are the features of urine,

1. Colour (நிறம்)
2. Density (எடை)
3. Froth (நுரை)
4. Odour (மணம்)
4. Deposits (எஞ்சல்)

4.A.4. நிறத் தொகை - Different colours of urine:

“பீதம் செம்மைபைங் கருமை வெண்மையென்
றோதைங்கொழுமையை யொத்துகு நீரே”

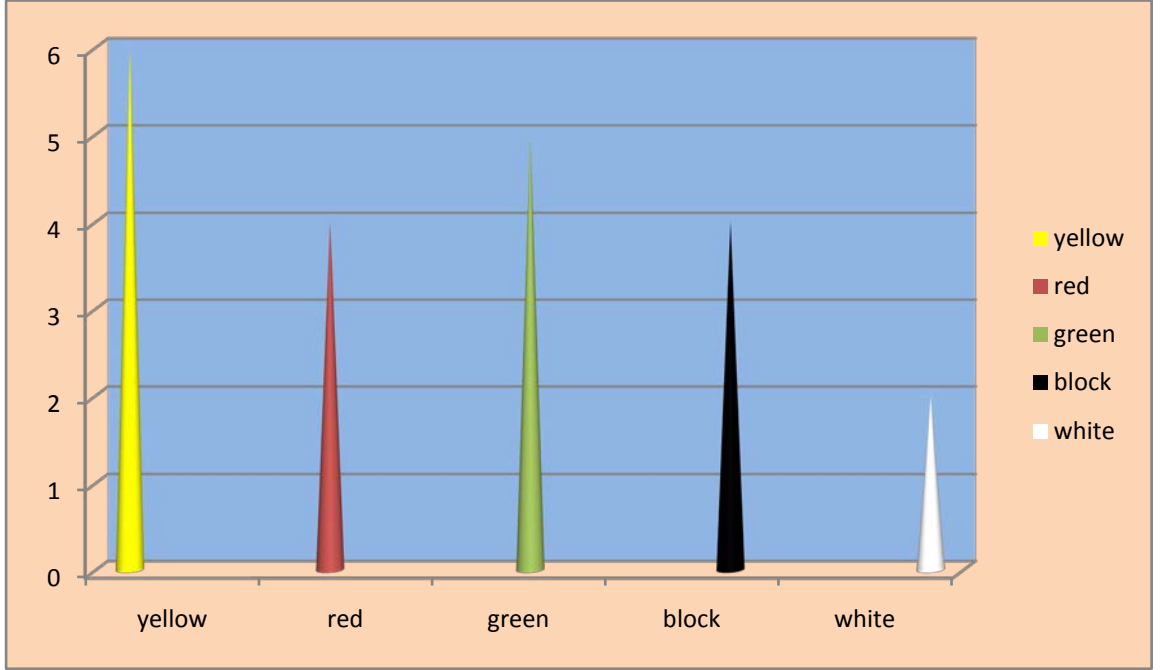
The urine may be of the colours,

1. Yellow
2. Red
3. Green
4. Black
4. White

4.A.4.I. SUBDIVISIONS IN EACH COLOURS:

“அரிசனத்தாறும் அருணத்து நான்கும்
அரிதத்தைந்தும் அஞ்சனத்தொரு நான்கும்
வெண்மையுள் இரண்டுமாய் விள்ளுஞ் சுருதியே “

According to the above verse there are six types in yellow, four in red, five in green, four in black and two in white coloured based on different disease conditions.



1. YELLOWISH CHANGES IN URINE:

1.a.Urine indicating states of improper digestion:

“நீரணும் வழுதுகு நீத்தம் நிறமெனின்
சீரணக்குறைவின் அபக்குவ நீரே.“

Urine taking the colour of water in which straw is drenched.

1.b. Urine indicating the ongoing digestion

"பாரில் துரிஞ்சிப் பழநிறம் பொருந்தில்
சீரணப்பக்குவ நீரெனத் தேரே.“

Here the colour of the urine is that of the Thurungi Pazham-Giant lime fruit (citrus medica).

1.c. Urine which shows excessive heat present in the body:

“செம்மையும் நிசியும் சேர்ந்தெழு நிறமெனின்
வெம்மையுயர் விளைந்தவிர் நீரே.”

Yellowish red urine is suggestive of excessive body temperature.

1.d. The colour of the urine in hot nature:

“காட்டின் நரந்தக்கனி நிறம் காணில்
சூட்டைத்தரற்குத் தொடுகுறி நீரே.”

If the colour of urine is similar to the wild orange, it indicates the rise in temperature.

1.e. The colour of the very hot urine:

“கொதியனல் நிறத்தின் கொள்கையெய்யாயின்
அதுவுட்டிணத்தை யடைந்த நீரே.”

The flame coloured urine denotes high temperature.

1.f. Very hotter than previously mentioned:

“மீதமுங் குங்குமப் பூவுமாரெழி றரின்
ஏதிதன் மேல் வெப்பின்றேனு நீரே.”

Saffron coloured urine denotes very high temperature in the body.

2. REDDISH CHANGES IN URINE:

“அரத்தமும் கருமையும் அண்ணிய கறைதரின்
இரத்தம்பொங்கலால் இறங்கிய நீரே.”
“செக்கச் சிவந்த பன்னீர்ப்பூப் பகருறின்
மிக்குதிரக் கொதிப்பாலு கு நீரே.”
“கருமையுள் செம்மைசேர் கறையுஞ் சிவப்பும்
குருதிபொங்கிய குறிபுகல் நீரே.”

Dark red colour of urine as that of rose flower may be observed in case of heated haematological systems and black and red colours admixed and frank red colours shows even more heated haematological systems.

3. GREENISH CHANGES IN URINE:

3.a. சீதள நீர் நிறம்:

“கருமைச் சாமளக் கருவுறுமாயின்
வரசீதளத்தால் வரப்படு நீரே.”

Black coloured urine with slight greenish tinge in it.

3.b. விழுத்தாலுண்டாகும் சீதள நீர் நிறம்:

“இடத்துறு குணத்தை ஏய்க்கு மெனிலோ
விடத்துறுசீதளம் மேலிடு நீரே.”

Urine of sky colour indicates toxic state of the body along with coldness.

3.c. மிகு சீதள நீர் நிறம்:

“தகுமொரு நீலச்சாயை காண்டிடினோ
மிகு சீதளத்தால் விகார நீரிதனால்
மருத்து நோய் பாலவிருத்தர்க்கு மாமே.”

A sort of bluish tinge in urine caused by extreme coldness and also by Vatha dominant diseases occurring in children and elderly people.

3.d. வாத பித்த கபங்களைக் கெடுக்கும் நீர் நிறம்:

“அம்ம நீலத்துரு வார்ந்துதடிக்கு மேல்
மும்மலச் சிதைவை முகளப்பிக்கு நீரே.”

Apart from being bluish tinged if it is also viscous indicating underling derangement of the three humour the urine.

3.e. மும்மலங்களை மிகவும் அதிகமாகக் கெடுக்கும் நீர் நிறம்:

“சொக்கிலைப் பச்சையின் தோற்ற முளதெல்
மிக்கமும் மலங்கெடவிழு நீர் கொடிதே.”

Urine appears frankly greenish as fresh foliage in diseases where all the humors are utterly deranged.

4. BLACKISH CHANGES IN URINE:

4.a..காமாலை நோயைத்தரும் நீர் நிறம்:

“வான்மீக மெழிற்குண் மைக்குண முறினது
தான் காமாலை நோய் தரும்ஃதின்றெனில்
பித்தநோயேனும்பிறக்கப்பணிக்குமே.”

Black colour in a saffron colour background shows the Kamalai (Pitha disease) condition.

4.b. உதிரக் கெடுதி நீர் நிறம்.

“அம்மையுஞ் சிறிய செம்மையுஞ் சிவணினோ
அரத்தத்தழி வென்றறை தரு நீரே.”

Saffron, black and little red coloured urine indicates a blood disorder

4.c..உதிரத் தழுக்கைக் காட்டும் நீர் நிறம்:

“கார்க்குள் புன்னரிக் கருவிரவிய தேனின்
ஆர்க்கத்தழுக்கை அறிவித்த நீரே.”

Greenish in dark coloured urine indicates unhealthy blood

4.d. சிலேத்தும வாதக் கெடுதி நீர் நிறம்:

“மையும் வெளிறும் மருவிய சாயை யேல்
ஐயுயிர் மிகக் கொதித் தழிவுறு நீரிது
காலாதீதக் கனல்பவத்துடையது
மாலாந்தருண சுரத்தர் விருத்தர்க்
குண்டாமை திரவியத்தூணாற் கொடிதே.”

Dark and whitish colours in urine indicate upset of Vatha and pitha. Also it indicates chronic body heat disorders and complications of fevers in elderly and associated fainting.

5. WHITISH OR LIGHT COLOURED IN URINE:

5.a.சுத்த சீதள நீர் நிறம்:

“வெண்மையுற்று மிகத் தெளிவிடைத்தேல்
உண்மையாஞ் சுத்த சீதளத்துதகமாம்
ஒந்நீர்வசப்படாடிதிவனுய்யுந்தரம்
முந்நீர்ப் பெருக்கமிழ்வான் உய்தலொக்குமே.”

Whitish or clear urine is usually because of sheer coldness of the body this condition is not amenable to medical treatment. A patient to get over from this condition is as it were a person having a new lease of life drowned in the raging sea.

5.b. சிலேத்துமத்தின் கொதிப்பு நீர் நிறம்:

“அறவெளிப்பிலும் சளியைப் போல் விழினது
மறவன் அதி கொதிப்பால் வருவனமே.

In conditions of highly agitated ‘coldness’ of the body the urine is said to be not only highly clear but also little mucoid in appearance.

4.A.4. CHANGES IN THE DENSITY OF URINE:

“அற்பமுங் கன்மற்றதி தெளிவுறு மெனின்
வற்புறு சீதளம் மன்னிக் கனத்துக்
கபத்தை இளக்கலால் கண்ட நீர் இஃதே”

If the voided urine is denseless and crystal clear then it is due to excessive cold and to the melting of the kabam

4.A.6. ODOUR:

“ஓதமணத்தோ டவ்வோத மொத்தி றங்கும்
சீதளங் கம்மியே தேகிகளுக்கே.”

1. சிறுநீர்ப்பை நாளப்புண்ணீர் மணம்

“வெய்ய தூர்க்கந்தம் வீசுநீர் மூத்திரப்
பைநாளமிவற்றைப் பற்று புண்குறியே
அம்மொழியின்றென்னிலமே முதலிய
மும்மலச் சுதமே மூலமென் றுணரே.”

An urine sample with atrocious odour indicates ulceration in the urinary tract and bladder.

2. உட்டிணரோக நீர் மணம்

“மட்டிற் புளிமண மணந்திழிந் திடினஃ
துட்டிணப் பிணிபிணிப்புற் றெழுநீரே
முடிவிலவுட்டிண முளரிவாயறல் போற்
படுசீதளச் சம்பந்தமாக்கிடுமே”

An urine sample with overwhelming odour of the tamarind to disorders of the body due to heat.

3. உதிரம் மிகுதியாலுண்டாகும் நீர் மணம்

“இனித்த மணத்தோ டிறங்கி நெய் மிக்குச்
சனித்த விருத்தியைத் தழுவிய நீரே
அல்லதவ் விருத்தி யாலாம் பிணிக் குழாத்த
தல்லதில் லென்பதாய்ந் தோர் மதமே.”

Urine descending with a sweet flavour implies an increased haematopoiesis in diseases like leukaemia.

4. பித்த சுபாவக் கெடுதி நீர் மணம்

“கருமான் மணமே கமழுமென்றாலது
குரவன் சுபாவ குணங்கேடு நீரே”

Urine with a smell of dark coloured deer is voided in conditions of pitham dominance.

5. சரீரப்பசைக் கெடுதி நீர் மணம்

“புலால் மணங் கமழிற் போதிய பசைக்கே
டலாதிலை அந்நீக் குணமின்றெனில்
அடையுந் ததியெ றறையத் தான்மிகக்
கெடுதியெனங் கிளக்குஞ் சுருதியே”

Urine with a smell of fresh meat (carnivorous) will be in decreased body adipose tissue.

4.A.7. FROTH ON URINE

“பந்தமெய்ப் பசையிளகப்படும் பருவத்
தந்தர்ப் பூதமாய் அனில் மூத்திரத்தில்
சம்பந்தப்படும் ததிநுரைப் புனலே”

When the greasiness of the body is melted, it gets associated with the urine in the gad form to cause froth in it. This greasiness of the body normally adds resilience and resistance to the body. In conditions of impending jaundice the froth appears to be multi coloured with yellow, block and coloured appearance. The quantum of froth gets reduced in conditions of reduced humours of the body.

Similarly, reduced urine output inspite of having normal intake of water throws light on impending anaemic disorders and associated lassitude.

4.B. NEIKKURI

4.B.1.நெய்க்குறியின் சிறப்பு

“ஐக்குறி கொடுவட வானிழ லமர்ந்தோர்
கைக்குறி தெரித்த நங்கடவுளைத் துதித்தே
மெய்க்குறி நிறங்க்தொணி விழிநா இருமலம்
கைக்குறி முழுவதூஉங் கற்றார் தம்மினும்
பொய்க்குறி மெய்க்குறி புகலு மெவர்க்கும்
நெய்க்குறி அதனை இந்நீணீலத் துரைப்பாம்”

Invoking the absolute reality who was assumed the form of gurupara, the lord facing south, seated in ayogic postura under the banyan tree, extolling the symbolic cinmudra by the very show of the right hand itself to the four sons of Brahmadeva, the chosen disciples lets us expound the formula of urine test us to get at the right clues for disease conditions without any doubt whatsoever as performed by our mystically intuited Siddha practitioners who have the command over the eight fold tests, without compounding one for the other, for the benefit of world at large.

4.B.2.எண்ணெய் விட்டுப் பார்க்கும் நீரின் விதி:

“நிறக்குறிக் குரைத்த நிருமாண நீரிற்
சிறக்க வெண்ணையோர் சிருதுளி நடுவிடுத்
தென்றுறத் திறந்தொலி ஏகாதமைத்ததி
னின்றதிவலை போம் நெறிவிழியறிவும்
சென்றது புகலுஞ் செய்தியை யுணரே.”

The urine collected should follow the same procedure like the general examination of urine. A drop of oil is dropped on centre of bowl without any shake. It should be ensured that the sunlight falls on it, but it should not be disturbed by the wind. A keen observation with our knowledge on the oil drop suggests the condition of the patient.

எண்ணெய் நீர்க்குறி

கல்வி சாத்திரங்கள் கற்ற கனதவ முனிவ ராய்ந்து
சொல்லுமூத் திரப்ப ரீட்சை சொற்றிட வினிது கேண்மின்
அல்லிடைச் சாம மொன்று சென்றத னப்பால் நீரை
நல்லபீங் கானில் வாங்கி நல்லெண்ணெய் விட்டுப் பாரே

-அங்காதிபாதம்

4.B.3. GENERAL NATURE OF URINE IN OIL-EXAMINATION:

“அரவென நீண்டினஃகே வாதம்”

“ஆழி போற்பரவின் அஃதே பித்தம்”

“முத்தொத்து நிற்கின் மொழிவதென் கபமே”

If the oil drop takes the shape of a snake, it indicates Vatha disease. if it spreads like a ring it indicates Pitha diseases and if it stands like a pearl it indicates Kapha diseases.

4.B.4. SHAPE OF THE OIL DROP IN COMBINED DERANGEMENT OF HUMOR:

“அரவிலாழியும் ஆழியில் அரவும்

அரவின் முத்தும் ஆழியில் முத்தும்

தோற்றில் தொந்த தோடங்களாமே”

If there is a combined shape like a ring in a snake or snake in the ring, snake and a pearl or a pearl in the ring, it indicates combined derangement of humors.

4.B.4. SIGNS OF THREE HUMORS:

“அழுந்து நெய்த்துளி அதுவுமும்மலத்தில்

எழுந்தகுறிகளெல்லா மொன்றில்

தோற்றுவது முத்தோட மென்றுன்னே”

If the oil drop sinks in the urine and if all features of the three humors are seen together in the urine. It suggests derangement of all three humors

4.B.6. SIGNS OF GOOD PROGNOSIS:

“விருத்தப்படிவமும் தரித்துப் பரவலும்

தேரித்த நெய்க்குறிக்கினி வருத்தமென்னுலகீர்

ஆங்கப்பரவல்போல் நீங்கும் எப்பிணியுமே.”

If the oil drop in the urine is round in shape and spreads gradually, it indicates good prognosis.

“அரிவாகு நத்தை அரியாதனத்தை

அறிதரு குறியால் மறுவின் றுயிர்க்கே.”

“நாணயச் சத்தியை வீணையைக் காணினோ

நாகுயிருடல் விடுத்தேகினும் மீளுமே.”

“முல்லை யரும்பு குளரிப் பூவுஞ்

சொல்லிய துளியுள் தோற்றிடு மாயின்

இல்லை இல்லை நோயென்பது சரதமே.”

If the oil drop takes the shape like Conch, Throne, Umbrella, Yazh (a string instrument), a lotus flower, Jasmine bud suggests good prognosis.

4.B.7.I.SIGNS OF CURABILITY:

“இன்னமுங் குறிகள் கேட்கில்
இப்படிப் பலவா றுண்டு
இன்னுமந் நீரி லெண்ணெய்
விட்டுநாம் பார்க்குங் காலை
மன்னிய வைபவங்கள்
மனிதர்போல் மச்சங் கொவில்
உன்னிய பிரகாரம் போல்
உயர்ந்திடு ஆனை போலும்”

If the oil drop in the urine spreads like Ritual fire, Human being, Fish, Temple corridors, Elephant it is curable.

4.B.7.II SIGNS OF CURABILITY:

“மலைகுடை விருக்கம் வெண்சா
மரையுடன் தாமரைப்பூ
கொலைசெய்யு மானைக் கொம்பு
குல்லாய்கண் ணாடி சங்கு
வலைவிழி யாளே கேளாய்
மகரதோ ரணங்கள் பூமி
தலைமையாம் வீணை போலும்
சவுக்கமா மனையே போலும்”

Further, if the oil drop takes the shape like Hill, Umbrella, Tree, A fan made of fur, Lotus flower, the tusk of a wild elephant, Cap, Mirror, Conch Tapestry, Earth, lute and the square shaped house it is curable.

4.B.7.III SIGNS OF CURABILITY:

பாகலி நிலையே வண்டும்
பகருந்தா மரையின் மொக்கும்
ஏகசிங் காத னங்கள்

இவைகள்போ லுருவங் கண்டால்
தேகமா நிதரி டத்தில்
சேர்ந்திருந் திடுக்கண் செய்யும்
ரோகமே நிற்க மாட்டா
துரைக்குஞ்சாத் தியக்கு றிப்பே

If it is in the shape of the leaf of bitter gourd, bee, buds of lotus and throne, the disease is curable.

4.B.8. SIGNS OF INTRACTABILITY:

"மத்தளங் கொடியெ பானை
மலமுண்ணும் பன்றி காட்டில்
வைத்திடு மிருக நாட்டில்
வாழ்ந்திடுங் குயவன் பண்ணுஞ்
சுத்தமாஞ் சக்க ரம்போல்
தோன்றிடு முருவன்ஹ் கண்டால்
சத்திய மாகச் சொன்னோம்
தாமத சாத்தி யந்தான்"

If the oil drop takes the shape of a drum, flag, pot, pig, jungle beast and potter's wheel the cure is slow and with some difficulty.

4.B.9. SIGNS OF INCURABILITY:

"நாலுகா லொருகா லிந்த
ஞாலத்தி லுரைக்கு மூன்று
காலுள மனிதர் காயம்
கனக்கவே பெருத்த மாந்தர்

மாலுறத் தலையில் லாத
மாந்தர்முன் கையிற் கத்தி
சூலமே உலக்கை வில்லு
தோன்றிடு மரிவாள் பாம்பே "

If the oil drop takes the shape of on obese man, man with one, three or four legs, a headless body, or as if a person holding a dragger. Three headed spear, iron pestle boe and sword, and snake the prognosis is bad.

பூனையே எலியே அம்பு
 புகல்நண்டு சுரைக்காய் கோழி
 கானிடைப் புலிகு ரங்கு
 கண்ணழல் பொங்கு சிங்கம்
 ஈனமில் குதிரை வெற்றி
 லைக்கொடி மற்று முள்ள
 ஊனமில் எருது காட்டில்
 உழன்றிடுங் கரடி தானே“

Further, if the oil drops takes the shape of a cat, mouse, arrow, crab, bottle gourd, hen, tiger, monkey, lion, horse, betel, creeper, bull and bear the prognosis is bad.

பறந்திடும் பட்சி ஆமை
 பகுருநற் றேளைப் போலும்
 சிறந்தெண்ணெய் விட்ட போதிலும்
 சிறியதாய்ச் சுருங்கி னாலும்
 புறந்தருங் கூந்தல் மானே
 பொங்கியெ பறந்திட டாலும்
 அறிந்திடுங் குறிக ளெல்லாம்
 அசாத்தியக் குறிப்புத் தானே

If the oil drop takes the shape of a bird scorpion tortoise or if it it non spreading or spreads very fast by if suggests bad prognosis.

“செய்ய நல்லெண்ணெய் தன்னைச் சிறுநீரில் விட்ட போது
 இயமதுறவே தாழ்ந்தா லசாத்தியக் குறியே யாகும்
 உய்வதுமரிதா மாதி ஒரு பொருளுடைய சித்தம்
 எய்துவதே யல்லாம் லெம்மனோ ரியம்பொண் ணாதே”

If the gingely oil drop sinks in urine it indicates bad prognosis.

4.B.10. SIGNS OF BAD PROGNOSIS:

“எண்ணெய் விடின் சரேலெனப் பொங்கிப் பரவின்
 திண்ணமப் பிணிக்குச் சிகிச்சையிறங்கின்றே.“
 ”விடுதுளி சிதறி வெவ்வெறொன்றாமல்

கடுகென ப் பரவின் கைவிடல் முறையே.“
 ”அவியு மூத்திரமு மணைந்தொன்றினாவி
 அவியும் என்றால் கௌதமர் அறையே.“
 ”ஓதுவ நெய்த்துளி இள்ளமுந்தில் தீதென
 மாதவ கற்பம் மன்னப்பயிலுமே.“
 ”அம்புகட கம்முசலம் சூலமொடுவாள்
 கும்பம் வெள்ளிலையெனக் குறிபடின் தீதே.

If the oil spreads fast or becomes small like a mustard or gets mixed completely with urine or sinks in urine, it suggests bad prognosis Further if the oil drop takes the shape like Sword, Arrow, Iron pestle, Three headed spear, Pot, Betel leaf indicates bad prognosis.

“எருதறு கியாளம் இபம்புலி மறியரி
 நரனர வழுங்குபுள் நரிமர்க் கடகரம்
 பூசைதேளி வற்றைப் போலுரு தோற்றின்
 பேசுவதென்னைப் பிணி தணியாவே.“

If the oil drop takes the shape like Lion, Elephant, Tiger, Ram, PigMan, Tortoise, Bird, Fox, Monkey, Ass, Cat, Scorpion indicates bad prognosis.

4.B.11. CURABLE AND INCURABLE STATES OF DISEASES:

சல்லடைக் கண்போல் தனித்தனித் துவாராமாய்ச்
 சொல்லுமுன் அற்றிடில் தொடலென கரமெனக்
 கௌதமர் உரைப்பினும் கபத்தால் கண்படும்
 தவியா அணங்கது சாத்தியம் என்பரே.“

If the oil drop takes the shape of a sieve, it suggests Kapha diseases. according to *Gowthama*, it is incurable but others say it it curable.

REVIEW OF LITERATURE - MANTHAARA KAASAM...

neerkkuri neikkuri

- Manthara Kaasam



4.B. INTRODUCTION OF KABAM

According to T.V Sambasivam Pillai, the Kabam is defined as the one of the three humors (life forces), Kaba diseases in common due to excess of heat in the region of the sacral plexus and its distribution, over or communication with the cerebral system. It is marked by diminution of blood, vitiation of semen, collection of phlegm in the chest, cough, fatigue etc.

4.B.1. THE SITES OF KABAM

“கூறினோஞ் சிலேத்மமது சமானவாயு
கொசமுசியோட சுழிமுனையை பற்றி விந்தில்
சீறியே சிரசிலாக் சினையைச் சேர்த்து
சிங்குவை யுண்ணாக்கு நிணமச்சை ரத்தம்
மீறியே நிறங்கோணம் நரம்பெலும்பில்
மேவியதோர் மூளை பெருங்குடல் கண்ணில்
தேறியதோர் பொருந்திடங்க ளெல்லாந்
சேர்த்து சிலேட்டும வீறிறக்குள் தடங்கண்டயே”

-சிகிச்சாரத்தின தீபம்

According to Vaidya Dheepam, Kabam dwells in the following places- Head, Tongue, Eyes, Nose, Throat, Thorax Bone, Bone Morrow, Joints, Blood, Fat, Sperm and Colon.

“அறிந்திடும் வாத மடங்கு மலத்தினில்
பிரிந்திடும் பித்தம் பேராஞ் சலத்தினில்
மறிந்திடு மையம் வசிக்கும் விந்துவில்”

-திருமூலர்

According to Sage Thirumoolar, Kabam exists in semen

“செப்புமுந்தி சிதையும் வாதநிலை ஒப்புமார்பு முறையும்

பித்தநிலைகப்புமுச்சிக் கழறுமையநிலை மெய்ப்பமாமுனி மீண்டுவுரைத்தே”

-வைத்திய சார சங்கிரகம் முதல் பதிப்பு

According to Vaithiya Sara Sangiragam, Iyam exists in head

“அபானமுத லுந்திவரை வாதநிலை
உந்தியின் மேல் மார்பு மட்டும் பித்தநிலை
மார்பு முதல் உச்சி வரை அய்யநிலை”

-அனுபோக வைத்திய பிரம ரகசியம்

According to Anupoga Vaithiya Prama Ragasiyam, the Kabam exists between the Navel region and head.

4.B.2. ஐயம் உருவாகும் விதம்

“இருப்பான நாடி எழுபதோ டீராயிரமான
தேகத்தில் ஏலப் பெருநாடி
ஒக்கதசமத்தொழிலை ஊக்கதச வாயுக்கள்
தக்கபடி என்றே சாரும்
சாருந்தசநாடி தன்னில் மூலம் மூன்று
பேருமிடம் பிங்கலையும் பின்னலுடன் மாறும்
உரைக்க விரற்காற்றொட்டுணர்த்துமே நாசி
வரைச் சுழியோமையத்தில் வந்து
வந்தகலை மூன்றில் வாயுவாமபானனுடன்
தந்த பிராணன் சமானனும் சந்தமறக்
கூட்டுறவில் ரேகித்தல் கூறும் வாதம் பித்தம்
நாட்டுங் கபமேயாம் நாடு.”

-சித்த மருத்துவவாங்க சுருக்கம்

4.B.3. CHARACTERS OF KABAM

S No	OWN CHARACTER	OPPOSITE CHARACTER
1	Kulirchi(Cold)	Akhini (Hot)
2	Baluvu(Heavy)	Elasu (Light)
3	Enippu (Sweet)	Kaaram (Pungent)
4	Mirudhu (Soft)	Kadinam (Rough)
5	Pasumai (Unctuous)	Varatchi (Dry)
6	Vazhavazhappu(viscid)	Karakarappu (Sandy)

4.B.4.PROPERTIES OF KABAM

“திடமீயு மென்பினைப்புத் திண்மையுற்ற யாப்பும்
அடலேர் வழுவழுப்பும் ஆக்கைக் -கிடர்க்கு
வெருவாப் பொறுமையும் மேலான காப்பாம்
பெருமைத்தா மையமெனப் பேசு”

-சித்த மருத்துவாங்க சுருக்கம் பதிப்பு-2006

The following are the natural properties of Kabam

- 1.Stability
- 2.Greasiness
- 3.Formation of joint
- 4.The ability to withstand hunger.
- 5.Thirst.
- 6.Sorrow.
- 7.Distress and Temperature are the qualities of Kabam

“ஆக்கிய கபருபத்தை யறிந்திடு முறைமை செப்பில்
தேக்கிய குளிரே யற்பந் தீயவெப் பதிகங் கண்டம்
தாக்கிய கோழையாலே தளர்விலாத் திடமுண்டாகித்
துாக்கிய புத்தியன்றித் துயருறு கெடுதி காட்டும்”

-அங்காதி பாதம் முதல் பதிப்பு

According to the Angaathipatham the actions of Kabam are chillness, phlegm in chest.

4.B.5. CAUSES FOR KABA DISEASES

“நயமாக ஒருவருடன் பேசும் போது
நாவிலொன்று மனதிலொன்று நாடும் பேர்க்கு
பயமாக வந்தவர்கட் கிடங்கொ டாத
பாதகர்க்கும் வேதத்தைப் பழிக்கின் றோர்க்கும்
துயமாகச் சூரியருக் கெதிரே நின்று
துரிசாக மலசலங்கள் விட்ட பேர்க்கும்
செயமாக விஷ்ணுசமயஞ்சிவ சமயந் தான்
திடாகரித்தது ரோகிக்கும் சேட்ப மீறும்”
-யூகி வைத்திய சிந்தாமணி 2ம் பதிப்பு

Apart from these, the Siddhar Yugi has discussed about the psychological factors, which may cause Silethuma Noi,

1. Those who speak pretense,
2. Not offering refuge to the unprotected
3. Despising the Holy books
4. Answering the nature's calls under the broad day light
5. Despising Vaishnavites
6. Despising Saivites

”மீறியே தித்திப் புபுளிப்புத் தானும்
மிகத்தின்னுங் கிழங்குவகை யருந்தி னாலும்
சாறியே சயித்தியமாங் குளிர்ந்த பண்டந்
தண்ணீர்தான் பழையதுகள் ருந்தலாலும்
சீறியே தன்வயது தனக்கு மூத்த
ஸ்திரீகளுடனது போகம் செய்த லாலும்
மாறியே மயானபுகை படுத லாலும்
வருகுமே சேட்பத்தின் மகிமை தானே”

-யூகி வைத்திய சிந்தாமணி 2ம்பதிப்பு -ப.எண்:126

In this poem, the Sage Yugi has discussed about the dietary factors, which may cause Silethuma No1,

- 1.Excessive intake of sweet taste
- 2.Excessive intake of sour taste
- 3.Increased intake of root tubers
- 4.Excessive intake of cold food
- 5.Excessive intake of cold water
- 6.Intake of unfresh food
- 7.Inhaling fumes from grave yard
- 8.Having sexual relationship with elder women

“ பாலான அய்யம் வரும் வகையைச் சொல்வேன்
பாலகனே பனியாலும் பழநீராலும்
காலையிலே முழுக்காலும் காமத்தாலும்

கருது மருந்தீட்டாலும் கர்மத்தாலும்
 வாலை மோகினியாலும் வாசத்தாலும்
 வன்மையுள்ள சயத்தாரை மருவலாலும்
 சால சுத்தியில்லா அவுஷத்தினாலும்
 சர்குணரை பழித்ததொரு தோஷத்தாலுமாமே
 தோஷ ரெசபானங்கள் கொள்கையாலும்
 தூறு மழைநனைவாலும் தூக்கத்தாலும்
 நாச மெலி விஷத்தாலும் ஓட்டத்தாலும்
 நாரியர்கள் அனுபோகம் மிகுந்திட்டாலும்
 ஆசை கொண்டு வெகுமனசாய் யோசித்தாலும்
 அறனைக்காய் பறங்கிங்காய் யருந்தினாலும்
 தேசமெங்கு மலைந்தாலும் மந்தத்தாலும்
 சிலேற்பனங் மிகுமெனவே செப்பினாரே”

-அகத்தியர் கன்மணி 100 -முதல் பதிப்பு

According to Agathiyar Kanmani , the causes for Kaba noi are, damp, taking bath in cool water, taking impurified drugs, despising holy persons, intake of impure fluids, exposure to rain, increased sleep, poisons and tiredness.

4.B.6.கபநோயின் இயல்பு - CHARACTERISTIC FEATURES OF KABAM

4.B.6.I. ACCORDING TO THERAIYAR VAGADAM

“அன்றியே சேத்து மத்துக்
 கடையான முடம்பு வேர்க்கும்
 நன்றென மீறியேறி
 நாவழுவழுத் திருக்கும்
 மன்றிய சிறுநீர் தானும்
 வன்மையா யுளைந்து வீழும்
 மன்றினில் தோஷந் தன்னை
 வாக்கினா லுணர்ந்து கொள்ளே”

-தேரையர் வாகடம்-பதிப்பு ஆண்டு 1975 ப. எண்-31

According to Sage Theraiyar, Characteristic features of Kabam are

1. Excessive sweating,
2. Viscous tongue,
3. Painful micturition.

4.B.6.II. ACCORDING TO AGATHIYAR VATHA KAVIYAM

“கேளப்பா சேத்துமத்தின் குணத்தைச்சொல்வோம்
கேள்மகனே பித்தத்தின்மே லங்குலத்துக்கப்பால்
காளப்பா சலமிகுதி யாகும்பாரு
கலந்துநவ துவாரங்க ளோடியுலாவி
ஏளப்பா யிடயதுதான் விடவுடாமல்
இருக்கும்பா நவத்துவார மெங்கும்நிற்கும்
சாளப்பா சற்பம்போல் சீறும்சீறும்
சமத்தான சேத்துமத்தின் குணந்தான்பாரே”

-அகஸ்தியர் வாத காவியம் 1000-முதல் பதிப்பு ப.எண் 60

Increased secretions from the nine openings of body.

4.B.6.III. ACCORDING TO AGATHIYAR AAYUL VEDHAM

“சேத்துமஞ்செய் குணங்கேள் சில்லெனவுடம்பு வேர்க்கும்
ஏத்தமாயுமி நீரூறியினித்து நாவமுவழுக்கும்
நாற்ற நீர்ழிந்து வீழும்நலம் பெரவெளுத்துமேனி
சீற்றமிக் குணங்கள் கண்டாற் சிலேத்துமத்தொகுதியாமே”

“இனிப்புடன் வெளுத்துநாவு மெடுக்கொணாநடக்கொணாது
பனித்தண்ணீர் சிறுநீர்பாயும் பஞ்சுபோல் வெளுக்கும்மேனி
செனிப்புடன் குறைந்துவாடி செயல் பிலமில்லாதாலே
முளைத்திடுஞ் சேத்துமத்தின் கூறென்று முனியுரைத்தார்”

-அகஸ்தியர் ஆயுள் வேதம்1200 முதல் பதிப்பு

Feeling of chillness with sweating, odorous urination, sweetness in tongue, pale tongue, tiredness, increased urination and anaemia.

4.B.6.IV. ACCORDING TO ANGATHI PATHAM

“செயலான சேற்பனத்தினேயைக் கேளுஞ்
செப்புடம்பு நாக்குப்பல் வெளுத்துக்காட்டும்
இயலான வாயினிக்கும் வேர்வை யுண்டா
மிருமல்விக்கல் கக்கல் தொய்வு மூச்சுமுண்டாம்
மயலான மிடறுதனைக் கம்மிப்பேசும்
வாயூறி வழுவுழுக்கும் மலசலாதி
பயில்வாக வெளுத்து நுரைத்துடனே வீழும்
பரிட்சிப்பாய் சேற்பனத்தின் பாங்கைத்தானே”

-அங்காதி பாதம் பதிப்பு ஆண்டு 1976-ப.எண்-32

Pale tongue, feeling of sweetness in tongue, excessive sweating, cough, hiccough, dyspnoea, hoarseness of voice, excessive salivation, pale motion and urine and frothy urination.

4.B.6.V. ACCORDING TO THIRUMOOLAR

“இடங்கியவைய மேலிரைப் போற்றிடுந்
தடங்கியிடு மிடுந்தனி விலாவிரண்டுநோம்
அடங்கிற் சுரங்காயுமளவற்ற கோழைநீர்
இடங்கியுடல் வற்றியிரத்தமுங் கக்குமே
கக்கிய மூவர்களிற் பெலன்கேளு
ஒக்கிய வாயுவுடல் கூடிடிற்பெலன்
தக்கியவாயு சகலத்துக் காதாரம்
சிக்கிய நோயைச்சிறக்க விளக்குமே”

-திருமூலர் குணவாகடம்-பதிப்பு 1922 -ப.எண்:21

Wheezing, Fever, Pain in the coastal region, expectoration, and weight loss.

சிலேத்தும் நோய் உடம்பில் சீதளத்தை அதிகப்படுத்தி எப்பொழுதும் வெப்பத்தை ஏற்படுத்தி சூடுபோல் காண்பித்து நீரை பெருக்குதலாம்.

-பதினெண் சித்தர் -ஆவியளிக்கும் அமுத சுருக்கம் 2ம் பதிப்பு

4.B.7. நோய் வரும் வழி - AETIOLOGY

4.B.7.I.கால இயல்பு –ENVIRONMENTAL FACTORS

“மகிமையாய் மாசியொடு பங்கு னிதான்
மருவியே வர்த்திக்கு மையந் தானும்
நகிமையாய் வைகாசி தனிற்கோ பிக்கும்
நன்மையாய்ச் சமிக்கின்ற காலங் கேளாய்
அகிமையாய் ஆடிதனில் மிகச்ச மிக்கும்
ஆவணியும் புரட்டாசி தன்னிற் கேளாய்
தகிமையாய் தாட்சியாங் கால மாகுஞ்
சதாசிவன்றான் சொன்னபடி சாற்றி னேனே”.

-யூகி வைத்திய சிந்தாமணி இரண்டாம் பதிப்பு ப.எண்:127

“தேள் முதன் மாசி சேனாபதிக் கே” என்பதாலும்

“திடமான விருட்சிகமுதற் கும்பஞ் சிலேட்டும மாகும்” என்பதாலும்

The Kaba diseases will be precipitated in the months from Kaarthigai to Maasi (December to April)

“காரண காரியத்தாற் கதித்திடுங் கபத்திற் கோபம்
ஆரணச் சேர்க்கை யாலே யாயிடும் பண்பு கூறில்
பூரண வசந்த காலம் போதுமத் தியானத் துள்ளும்
வாரண நிசிமூ வைந்தி னுள்ளுமூண் மருவ லாகா

காணுறு கபகோ பந்தான் கனமது மகர மாதம்
காணுறு சலமே யுண்ணக் கருதிய மந்தந் துஞ்சக்

காணுறு கன்ன லெள்ளுக் கடும்புளிப் புறைப்புப் போடு
காணுறுந் தித்திப் பான கறிமுத லன்னங் கொள்ளே”

-அங்காதி பாதம் முதல் பதிப்பு

The Kaba diseases will be precipitated in the month of Thai (Jan-Feb)

“கரும்புவில்லோன் காலம் கபம்வேற் றிடத்தும்
பெருகவாய்ப் புண்டாகும் பெண்ணே -உருக்கியெல்லோன்
ஓங்கையம் ஆக்குமிடத் துற்றனலை வீட்டிமிகத்
தீங்கிழைக்கும் மெய்க்குத் தெரி”

-சித்த மருத்துவாங்க சுருக்கம் பதிப்பு-2006

This is considered to be the season of Manmadha; the God of love .The Kabam that has increased in the latter winter worsens with the involment of Pitham and causes Kaba disease

4.B.7.II. உணவு வகைகள்– DIET

“மதுர மதிகம் அருந்துவோர்க்கு
மலியும் நிணமும் கபமுந்தான்
கதுமென் றுடலும் பெருத்துவிடும்
கனலுங் குறையும் செரியாது
பொதுவில் சுரக்கும் மதுமேகம்
புகல்கண் டலங்கல்புரை குழலும்
விதுவின் நுதலாய்ச் சந்நியாசம்
விளையு மெனவே விளம்புவரே”

- சித்த மருத்துவாங்க சுருக்கம் பதிப்பு-2006

Excessive intake of sweet taste foodstuff accumulates fat in the body and increases Kabam and mucous. Further, this will create obesity and may reduce the digestive fire in the body that results in indigestion. This negative tendency of sweetness will lead to diabetes.

4.B.8. FUNCTIONS OF DERANGED KABAM

(ALTERED FUNCTIONS OF KABAM)

“கொண்டிடுங் கபகோ பத்தாற் குமிறிமுகக் கடைத்து வீசக்
கண்டிடுந் திணவு வாந்தி காசமே சுவாசம் வெப்பு
மிண்டிடுங் கபோல மொட்ட மிகுதடிப் பாய்வாய் வெள்ளை
அண்டிடு மதுரஞ் சீத மற்பநித் திரையோ டாக்கை
ஆக்கையிற் பிராணனான வனிலமோ டமருஞ் சந்து
ஆக்கையாற் பெலத்துக் கட்டு மைந்ததாந் தொழிலே யாகும்
ஆக்கையா லேக தேசத் தன்னிய மில்லை யென்றும்
ஆக்கையா மனிலம் பித்த மதிற்சிலேற் பனமுஞ்சேர்ந்ததே”

-அங்காதி பாதம் பதிப்பு ஆண்டு 1976-ப.எண்-67

According to Angaathipatham, the deranged Kabam produces nasal congestion, itching, vomiting, breathlessness, fever, sleep disturbance.

“தையலே சிலேற்பனந்தான் மீறி நின்றாற்
சத்திவிக்க லிளைப்பிருமல் சயமேயாவி
உய்யலிலா வுளைமாந்தை வரட்சி வெப்போ
குண்மூச்சுத் தொய்வு முட்டுக் கம்மிப்பேசல்
பையவுடன் மெலிந்தசனந் சிறுத்துக்காட்டல்
பலகாலும் வேர்வைகொளல் நெஞ்சடைத்தல்
நையமிக வெலும்புதனைப்பற்றி நாளு
நலமிலாப் பலபிணிகண்ணணும் பாரே”

-அங்காதி பாதம் பதிப்பு ஆண்டு 1976-ப.எண்-33

According to Angaathipatham, the deranged Kabam produces vomiting, hiccup, tuberculosis, intestinal tuberculosis, dryness, tiredness, hoarseness of voice, loss of weight, loss of appetite, increased sweating.

“மிக்க கபந்தான் கோபித்தால்
மேனி நெரிக்குஞ் சிக்கனவாம்
தக்க தினவு குளிராகும்
தக்க வீங்குமுகம் வெளுக்கும்
மிக்க மயக்க மந்திக்கு
மிகவு முறக்கம் பசிகெடுக்கும்
தக்க வாயுந் தித்திக்கும்
சாற்றி னோமில் விலக்கணமே”

-தேரையர் வாகடம் முதல் பதிப்பு-ப.எண்:14

According to Theraiyar Vagadam, the deranged Kabam produces itching, chillness, swelling of legs, paleness of face, giddiness, increased sleep, loss of appetite, sweet taste in mouth.

“ஐயமே கதித்த போதி லரியவெப் பிரும லாகும்
நையுளை மாந்தை யீழை நளிருளிர் விக்கல் சத்தி
செய்யமூச் சடைப்பி ரைப்புத் தீதுறு காசரோகங்கள்
தொய்யுமெய் யிளைப்புக் காசந் தோன்றுமென் றறிஞர் சொன்னார்

ஐயமே கதித்த போதி லாகமு மிகவும் வற்றும்
 மெய்யழன் றிடும்வெ தும்புமபானமுங் கருகி வேறாம்
 நையவே சிதறித் தொண்டை யடைத்திடுங் குரலுமீ னம்
 தொய்யுமெய் வீங்குஞ் சோகை சூலையு மதிசாரங்கள்
 சார்புறுந் தாது நாசந் தருசெவி யிரைத்தடைக்கும்
 ஈரமாய் வேர்வை மிஞ்சுமிளமையு மூப்ப தாகும்
 சேருநாத் தித்திப் பாகுஞ் சீதமாய் நாவ முப்பாம்
 நேரிய வுடம்பு பல்நா மலசல முகமும் வெண்மை”

-பரராசசேகரம் 4.பாகம் -பதிப்பு-1935

According to Pararasasegaram, the deranged Kabam will produce cough, vomiting, and chillness, and hiccough, dyspnoea, hoarseness of voice, pale motion and urine.

4.B.9. KINDS OF KABAM -5

“அளியையம் நீர்ப்பியைய மாஞ்சுவைகா ணையம்
 தெளிந்த நிறைவையம் தேர்ந்து -சுளித்திடா
 தொன்றியைய மென்றைம்பே ரோதையஞ் செய்கையால்
 நன்றியற்றும் மெய்க்கு நவில்
 ஆதர வாம்மெய்க் கவலம் பதமாங்கி
 லேதக மாஞ்சுவைப் பேதமுணர்ப் -போதகமாம்
 தற்பகமாஞ் சந்திகளிற் றங்குஞ் சிலேடகமா
 மற்பமிலாச் சேத்தும மைந்து”

- சித்த மருத்துவாங்க சுருக்கம் பதிப்பு-2006

Eventhough the Kabam seems to be the same; it has got five different forms and actions.

- | | | |
|---------------|---|---------------------|
| 1.Avalambagam | - | Serum |
| 2. Kilethagam | - | Saliva |
| 3. Pothagam | - | Lymph |
| 4. Tharpagam | - | Cerebrospinal fluid |
| 5. Santhigam | - | Synovial fluid |

1.AVALAMBAGAM (SERUM)

“இயல்பினில் அமைந்துள உரத்தினாலும்
இனிய வுணனித்துள ரசத்தினாலும்
இயங்கிடும் புனலது நீர்மையாலும்
எழிற்பிட ரிருதய மையவயின்
பயன்பெற அளித்திடு முரத்திலார்ந்து
பலம்வளம் அளியையம் எனுமருந்து
பயந்தருந் தமிழ்க்கலை உரையவலம்
பகமீது வடமொழிப் பனுவலரே”

- சித்த மருத்துவாங்க சுருக்கம் பதிப்பு-2006

It lies in the lungs and help in respiration. It causes firmness of the limbs. This is vital among all types of Kapham for it controls the other four Kapham and maintains equilibrium.

2. KILETHAGAM (SALIVA)

“ஆமா சயத்திருந் தன்னத்தி லார்கடினச்
சாமான் களைத் தகர்த்துத் தண்ணீர்போல் -ஆமாறு
நன்கியற்று நீர்ப்பிபையம் நாட்டுங் கிலேதம்
நன்கியற்று முத்திரச்சொல் நாடு”

-சித்த மருத்துவாங்க சுருக்கம் பதிப்பு-2006

It lies in the stomach. It mixes the consumed food and water and promotes the digestive process.

3.POTHAGAM (LYMPH)

“அருஞ்சோலை யரும்பிடு மேற்றமுள
அறுசுவை யறிந்திடு மாற்றலுள
பெருந்திறல் உடையநல் நாக்கினிலே
பெருமையாய்ப் பொருந்திய சேத்துமமே
விருந்திடு சுவைகளைத் தோற்றுவிக்கும்
மிகுசுவை யறியையஞ் சாற்றுமதை
இரும்புகழ் வடமொழி போதகமென்
றியம்பி மிதையறி நீநிதமே”

-சித்த மருத்துவாங்க சுருக்கம் பதிப்பு-2006

It lies in the tongue and helps to realize the taste of the consuming food.

4.THARPAGAM (CEREBROSPINAL FLUID)

“சிரத்தே யமர்ந்துகட்குச் சீதம் பொறிகட்
குரமும் நிறைவுமுதவும் -சிறந்த
கபமாம் நிறைவையம் காசிலா தற்பக்
கபமெனும் வாமநூல் காண்”

-சித்த மருத்துவாங்க சுருக்கம் பதிப்பு-2006

Sustaining in the head, this gives refrigerant effect to cool the eyes and other sense organs.

5. SANTHIGAM (SYNOVIAL FLUID)

“என்புட ணென்பிணைந் தேய்ந்தநற் சந்திதங்கி
வளமை வனப்பு வழுவாத -தன்மைதரும்
ஒன்றியையந் தன்னை உரைப்பர் வழுவழுக்கும்
இன்பச் சிலேட கமென்று”

-சித்த மருத்துவாங்க சுருக்கம் பதிப்பு-2006

Sustaining in the joints this makes them move freely and easily

4.B.10. TYPES OF KABAM

4.B.10.I. ACCORDING TO YUGI VAITHYA SINTHAMANI

1. இருமல்சிலேத்துமம்
2. காசசிலேத்துமம்
3. சுவாசசிலேத்துமம்
4. தீபனசிலேத்துமம்
5. மந்தசிலேத்துமம்
6. வாதசிலேத்துமம்
7. பித்தசிலேத்துமம்
8. தொந்தசிலேத்துமம்
9. சன்னிசிலேத்துமம்

1. சுரசிலேத்துமம்
2. அதிசாரசிலேத்துமம்
3. சலசிலேத்துமம்

4. அக்கினிசிலேத்தும்
5. பூதசிலேத்தும்
6. முயலகசிலேத்தும்
7. வெறிசிலேத்தும்
8. விகாரசிலேத்தும்
9. சுரோணிதசிலேத்தும்
10. விரணசிலேத்தும்
11. தூர்க்கந்தசிலேத்தும்
12. நித்யசிலேத்தும்

4.B.10.II. ACCORDING TO DHANVANTHIRI VAITHIYAM- I PART

1. பிரதானசிலேத்தும்
2. வாதசிலேத்தும்
3. பித்தசிலேத்தும்
4. பக்குவாசயசிலேத்தும்
5. ஆமாசயசிலேத்தும்
6. இரத்தசிலேத்தும்
7. மூலசிலேத்தும்
8. சுக்கிலசிலேத்தும்
9. கபாலச்சிலேத்தும்
10. கண்டசிலேத்தும்
11. இருதயசிலேத்தும்
12. உதரசிலேத்தும்
13. ஸர்வாங்கசிலேத்தும்
14. அதிலபாரசிலேத்தும்
15. சுரசிலேத்தும்
16. பிராணசிலேத்தும்
17. உதானசிலேத்தும்
18. வியானசிலேத்தும்
19. சமானசிலேத்தும்
20. அபானசிலேத்தும்

4.B.10.III. ACCORDING TO ROGA NIRNAYA SAARAM

1. நுரைசிலேத்துமம்
2. சுவேதசிலேத்துமம்
3. மகாசிலேத்துமம்
4. லாலாசிலேத்துமம்
5. கூஷிணசிலேத்துமம்
6. வமனசிலேத்துமம்
7. சுடகசிலேத்துமம்
8. கோசசிலேத்துமம்
9. தொனிசிலேத்துமம்
10. துக்கசிலேத்துமம்
11. இக்காசிலேத்துமம்
12. உக்காரசிலேத்துமம்
13. சோஷசிலேத்துமம்
14. ஊமைசிலேத்துமம்
15. சுரசிலேத்துமம்
16. வாதசிலேத்துமம்
17. பித்தசிலேத்துமம்
18. மூர்ச்சைசிலேத்துமம்
19. சயசிலேத்துமம்
20. ரத்தசிலேத்துமம்

4.B.10.IV. ACCORDING TO AGASTHIYAR VAITHIYA SINTHAMANI-4000-Ist PART

1. வாதசிலேத்துமம்
2. பித்தசிலேத்துமம்
3. சிக்குவாசிலேத்துமம்
4. இரத்தசிலேத்துமம்
5. உக்காரசிலேத்துமம்
6. கோசசிலேத்துமம்
7. சுரசிலேத்துமம்
8. சுக்கிலசிலேத்துமம்

9. துக்கசிலேத்தும்ம்
10. தொனசிலேத்தும்ம்
11. மகாசிலேத்தும்ம்
12. பேனசிலேத்தும்ம்
13. மூகைசிலேத்தும்ம்
14. மூர்ச்சைசிலேத்தும்ம்
15. வமனசிலேத்தும்ம்
16. சீணசிலேத்தும்ம்
17. சயசிலேத்தும்ம்
18. சோடசிலேத்தும்ம்

4.B.10.V. TYPES OF KABAM ACCORDING TO ANUBHAVA VAIDHYA DEVA RAGASIUM

1. வாதசிலேத்தும்ம்
2. பித்தசிலேத்தும்ம்
3. சயசிலேத்தும்ம்
4. மூர்ச்சைசிலேத்தும்ம்
5. சுடகசிலேத்தும்ம்
6. மோகைசிலேத்தும்ம்
7. துக்கசிலேத்தும்ம்
8. தொனசிலேத்தும்ம்
9. கோசசிலேத்தும்ம்
10. சுவேதசிலேத்தும்ம்
11. மகாசிலேத்தும்ம்
12. பேனசிலேத்தும்ம்
13. லாலாசிலேத்தும்ம்
14. வமனசிலேத்தும்ம்
15. சீணசிலேத்தும்ம்
16. சுரசிலேத்தும்ம்
17. சோசசிலேத்தும்ம்
18. உத்காரசிலேத்தும்ம்
19. இக்காசிலேத்தும்ம்

4.B.10.VI. TYPES OF KABAM ACCORDING TO AGATHIYAR 2000,

“தானெனு மீரேழ் நூறு தன்னிலெண்பத்து மூவை
ஊனுயிர் சீதளத்தி னூழ்வினை யதிகஞ் செய்தே
யீனமா முடலும் வற்றி யெழுந்தபின் நோயதெல்லாந்
தேனமா மொழியாய் வண்ணஞ் சேத்துமஞ் செப்பலுற்றேன்”

-அகஸ்தியர் 2000 பதிப்பு ஆண்டு 1989-ப.எண்:45

The diseases due to Kabam are 1483 in number. They are mainly due to chillness.

4.B.10.VII. TYPES OF KABAM ACCORDING TO PATHINEN SIDDHAR

“தீருமுனிவர் வாகடத்தைத்திறமா யுருவுங் கண்டறியச்
சீருஞ் சேத்ம ரோகவிதஞ் தெளிவாய் தொண்ணூற் றாறு
தொகை சாரும் பன்னூலாராய்ந்து சதுராய்ச் செய்து பிணியகல
நேரும் வைத்ய சாரமென நெடிய வரைந்த குருநூலே”

-பதினெண் சித்தர் -ஆவியளிக்கும் அமுத சுருக்கம் 2ம் பதிப்பு-376

According to Pathinen Siddhar, the diseases due to Kabam are 96 in number.

4.B.11. CLASSIFICATIONS OF KABAM

S No	Names of the Books	Types
1.	Yugi Vaithiya Sinthamani	21
2.	Dhanvanthiri Vaithiyam- I part	20
3.	Roga Nirnaya Saaram,	20
4.	Agasthiyar Vaithiya Sinthamani-4000-I part	18
5.	Anubhava vaidhya deva ragasium	19
6.	Agasthiyar 2000	1483
7.	Pathinen siththar- Aaviyalikkum Amudha murai churukkam	96

4.B.12. சேத்துமகோப நீர் நிறம்

வளமுற வெள்ளையாகி வற்றி நீர் குறுகி நின்றால்
தெளிவுற சேத்துமத்தின் செய்கை யென்றுரைக்கும்
குளிர்மயினலே வெள்ளையாகிய குணமாமென்றும்
இளகு பச்சிரத்தந்தன்னா லிருகின தென்றுஞ் சொல்லே

If the urine is white and scanty, it denotes Kapham. It may be due to cold or derangement of blood.

4.B.13. ஐய தேக் குறி :

“தானான சிலேற்பனைத்தா லெழுந்த தேகம்
கனத்திருக்கு மனம்பெலெக்குஞ் சரீரஜ்ம் வேர்க்கும்,
மானார்மேல் மயலாகுஞ் சிவந்த மேனி
வானிடிபோற் குரலாகும் வணக்க மாகும்
ஆனாலோ பொய்யதை மெய்யா யுரைக்கும்
அறப்புசிக்குந் தித்திப்போ டிண்ணுங் கைகால்,
ஊனாகக் கசிந்திருக்குங் காசங் காச்சல்,
உண்டாகு மென்றுமுன்னோ ருரைத்த வாறே“

The physic of the Iyyam had redness, bulky, sweating, husky voice, responsible character and eagerness for sweet taste.

4.C. KAASAM

Other names:

Irumal

Eelai

4.C.1. DEFINITION

1.2.1. According to siddha maruthuvam, noi naadal noi mudhal thirattu part – ii

Makes noise similar tapping pot shed over bronze vessel. This sound is created because, to bring out the phlegm formed due to kabam formation in throat and chest.

4.C.2.Aetiology

மாதர்களது போகத்தை விரும்பா
வழிதனில் நின்றோரும்
தீதுற துக்கமீ மதமொன்றால்
தின்றசை யுண்டிடுதல்
ஏகுமுறஞ் சாயமடி தாக்கல்
எதிர்ப்புகை புழுதி புழல்
சீதமுருங்கா யுண்டிடில் காசஞ்
சேர்ந்திடு மக்கணமே

-(கையெழுத்து பிரதி)

வேகின்ற வதிகமாம் புகையினாலும்
மீறுகின்ற பாணத்தால் மிக்குந்தானே
பாணத்தால் பரமாக்கினி மிகுக்கை யாலும்
பாரமா மாமிசங்கள் புகிக்கை யாலும்
தாணத்தாற் சந்ஜாரந் தவிர்க்கை யாலும்
சரிபடா பதார்த்தங்கள் புசித்த லாலும்
தீனத்தாற் புசியாமலிருக்கை யாலும்
சேயிழையார் மேலுன்பஞ் சிதைவதாலும்
மானத்தால் மாதுக்க மடைவ தாலும்
மதத்தாலுஞ் சுவாசமது மருவுங் காணே
காணலே தேவதைக்கு பிரித்த பண்டம்
களவாடித் தின்ராலுங் கணவன் றன்னைத்
தோணவே நித்தயைச் சொல்லுவ தாலுஞ்
சுசியான பதார்த்த மெச்சில் பண்ணி னாலும்
வேணவே ஒருவர் கொடுமைகடான் விளம்புவொர்கும்
பேணவே சபைதனிலே சொன்னப் பேச்சுப்
புரண்டோர்க்குங் காசமது பிறக்குந்தானே

(யுகி சிந்தாமணி சி.ம.)

Kaasam is caused by

- Exposure to cold air.
- Excessive intake of cold foods and very hot foods.
- Speaking and singing loudly.
- Inhalation of dust, fumes, smoke , spicy foods,bad smell.
- Obstruction in the respiratory pathway.
- Increased intake of non-veg foods
- Obesity
- Stoling god's things
- Telling lies
- Intake of allergic or infected foods
- Unemployed
- Intake of unlike foods
- During fasting
- Increased sleep
- Misbehaving to their spouse
- Cheating
- Quarelling
- Sleeping in mist.

4.C.3. மந்தார காசம்

4.C.3.I. According to kaeluthu pirathi:

“மந்தார காச மழைமப்பு மார்பு நெஞ்சு,
தந்தான மீளை தனியடைத்த குத்திருமல்,
தும்மல் வலி நாசி நீர் சுரமிரைப் பாமசாதி
பொம்மிவரு மென்று புகல்”

(சி.ம. கையெழுத்துப் பிரதி)

The symptoms of manthaara kasam includes cold, cough,sneezing,rhinitis,wheezing.

4.C.3.II. According to Yugi Vaidya Chinthamani:

“தானான தூயதோர் நாசி தன்னில்
சலநோய்நீ தன்விழுந்து தும்ம லுண்டாம்,
மானான் மார்பு நெஞ் சடைத்து மூச்சு
வலுவாகப் பாம்புபோற் சீற லாகும்.
கானான் கண்டமொடு முகமுங் காதுங்
காயமதுங் கசிவாகி வியர்வை யாகும்
ஏனான யிருமலொடு கோழை கம்மல்
இரைப்பாகு மந்தார காச மாமே.”

(யூகி சிந்தாமணி)

குறிப்பு- “மப்பு” என்றால் மழை பெய்வதற்குரிய நீர் கொண்ட மேகம் தோன்றியபொழுது என்பதாகும்.

The symptoms of manthaara kasam includes, Sneezing, rhinitis, wheezing, chest tightness, increased perspiration, Cough with mild expectoration.

- மந்தாரம் - Rainy season or cloudy season - pg no 697, Vol : I
- காசம் - Asthma (It is an attack of with great difficulty in breathing and is of spasmodic character) - pg no 1310 , Vol : I
- நாச - nose pg no 1638, Vol : IV
- சயூ - water pg no 1939, Vol : III
- தும்மல் - sneezing pg no 1201 , Vol : IV
- நெணுங் - chest pg no 1920 , Vol : IV
- மூச்சு - breath pg no 876, Vol : I
- வலுவு - பலம் pg no 1017, Vol. I
- சீறல் - hiss of serpent through anger pg no 126 , Vol: IV
- கண்டம் - neck pg no 1026 , Vol : I
- முகம் - face pg no 817 , Vol : I
- காது - ear pg no 1346 , Vol : I

- காயம் - body pg on 1370 , Vol : I
- வியர்வை - perspiration pg no : 1133 , Vol : V
- இருமல் - The sound produced ordinarily by smoke, dust entering the mouth through the nostrils.- Pg no 898 , Vol : I
- இரைப்பு - Difficulty in breathing attended with wheezing - pg no 915 , vol : I
- கோழை கம்மல் - Formation of phelgm in the chest.pg no 1745, Vol : II

4.C.4.TYPES OF KAASAM:

- Kaasam (Erumal) is of 12 types
 1. Manthara kaasam
 2. Pakka manthara kaasam
 3. Sudar erumal
 4. Ratha kaasam
 5. Swasa erumal
 6. Vali erumal
 7. Thee erumal
 8. Iya erumal
 9. Vali azhal erumal
 10. Azhal iya erumal
 11. Mukutra erumal
 12. Peenisa erumal

4.C.5 According to Muni Vaidya Chinthamani:

“முனியான இருமலது ஐந்து மாகும்
 முரணுமருந்திடுயிருமல் முழுக்க மாகக்
 கனியான மதுவிருமல் கஞ்சாவி நிருமல்
 கனமான சுரவிருமல் கதித்தே முந்த
 தினியான இரத்தமா மிரும லோடு
 செனிக்கின்ற இருமலது ஐந்து மாகும்
 அனியான ஐந்திண்ணுட ஆண்மை தன்னை
 அதனுடைய உற்பத்தி யறியக் கேளே”

Kaasam is classified as five types

1. மருந்தீடு இருமல்
2. கஞ்சா இருமல்
3. மது இருமல்
4. சுர இருமல்
5. இரத்த இருமல்

4.C.6.Signs and Symptoms:

இருமலொடு கண்டத்தினுட்புறம் நமைபற்றி
ஈளைவிழ்ந்தழல் மூச்சு தாய்
இயல்பான தொனிமாறித் தொண்டை கட்டாகியே
எழிலகல நொந்துலர்த்து
வருமற்ப வாந்தியுடன் வென்விலா வலிகொண்டு
வாயுணவு வேண்டாததாய்
மானவுடல் வற்றி கருத்தே குளிர்ந்து
மகவலிகொண்டு துயரமெய்தி
மருவுறா வெப்பமொடு திமிரி களைப்போடுகண்
மஞ்சளித்திட்டு முகமும்
வாடாது வீக்கமாய் வெளிரியே யாண்மையது
மாறிமிகு நெடு நாற்றமாய்
பொருவு மைன்னிறமுற்ற குருதி மேனோக்கிப்
பொருந்துவது காசமேன்னப்
புகலுறு மிருமல் நோய் முற்குறி எனப்
புகல்வர் புவிமீ தரிந்துணர்வையே

1. Throat pain
2. Soar throat
3. Rhinitis
4. Chest pain due to recurrent cough
5. Thriving for hot food

6. Low back ache
7. Vomiting
8. Loss of appetite
9. Expectoration with black, red, yellow, blue and green

4.C.7.Naadi:

தானமுள்ள சேத்துமந்தா னிளகில் வெப்புச்
சயமீளை யிருமல் மந்தார காசம்
ஈனமுருஞ் சன்னி விடதோடம் மனதார காசம்
இருத்ரோகங் கரப்பான் விரணதோடம்
மானனையீர் சூலைதிரள் வியாதி வீக்கம்
வருஞ்சத்தி சுவாசம்நெஞ் சடைப்பு தூக்கம்
ஏனமுருங் காமாலை பாண்டு சோபை
எழுசுரங்கள் பலத்திற்கும் விடமுண் டாமே

Kaasam has the following Naadi.

1. Vaatha Kapham
2. Increased Kapham
3. Pitha Kapham
4. Kapha Pitham
5. Kapha Vaatham
6. Increased Pitham

REVIEW OF LITERATURE - MODERN ASPECTS...

neerukkuri neikkuri

- Manthara Kaasam



REVIEW OF LITERATURE - URINE...

neerkkuri neikkuri

- Manthara Kaasam



REVIEW OF LITERATURE - BRONCHIAL ASTHMA...

neerukkuri neikkuri

- Manthara Kaasam



5.A.1. URINE FORMATION: ANATOMY AND PHYSIOLOGY

5.A.1.1. INTRODUCTION

Kidney excretes the unwanted substances including metabolic end products and those substances, which are present in excessive quantities in the body, through urine.

Normally, about 1-1.5 litres of urine is formed every day. The mechanism of urine formation includes various processes. First, when blood passes through glomerular capillaries, the plasma is filtered into the Bowman's capsule. When this filtrate passes through the tubular portion of the nephron, it undergoes various changes both in quality and in quantity. Many wanted substances like glucose, amino acids, water and electrolytes are reabsorbed from the tubules. This process is called tubular reabsorption and some unwanted substances are secreted into the tubule from peritubular blood vessels. This process is called tubular secretion or excretion.

Thus, the urine formation includes the following three processes:

1. Glomerular filtration
2. Tubular reabsorption
3. Tubular secretion

Filtration is the function of the glomerulus or renal corpuscle of nephron and, reabsorption and secretion are the functions of tubular portion of the nephron.

1. GLOMERULAR FILTRATION:

When the blood passes through the glomerular capillaries, the plasma is filtered into the Bowman's capsule. All the substances of the plasma are filtered except the plasma proteins. The filtered fluid is called glomerular filtrate. During filtration, the substances pass through three layers of structures namely:

1. The endothelium of glomerular capillary membrane
2. Basement membrane
3. Spaces between pedicles (fenestra) of epithelial cells of visceral layer of Bowman's capsule.

The glomerular filtration is called ultra filtration because; even the minute particles are filtered. But, the plasma proteins are not filtered due to their large large molecular size. The protein molecules are larger than the slit pores present in the endothelium of capillaries. Thus, the composition of the glomerular filtrate is similar to that of plasma except in the absence of plasma proteins.

2. TUBULAR REABSORPTION:

When the glomerular filtrate passes through the tubular portion of nephron, both quantitative and qualitative changes occur. Large quantity of water (more than 99%), electrolytes and other substances are reabsorbed by the tubular epithelial cells. The substances, which are reabsorbed, pass into the interstitial fluid of renal medulla. And, from here, the substances move into the blood in peri tubular capillaries. As the substances are taken back into the blood, the entire process is called tubular reabsorption.

- **SELECTIVE REABSORPTION:**

The tubular cells of kidney selectively reabsorb the substances present in the glomerular filtrate, according to the needs of the body. So, the tubular reabsorption is called the selective reabsorption. Depending upon the degree of reabsorption, the various substances are classified into 3 categories.

1. High threshold substances:

The substances like glucose, amino acids, acetoacetate ions and vitamins are completely reabsorbed and do not appear in urine under normal conditions.

2. Low threshold substances:

Urea, uric acid and phosphate are reabsorbed to a lesser extent.

3. Non threshold substances:

The metabolic end products like Creatinine are not at all reabsorbed and are excreted in urine irrespective of their level.

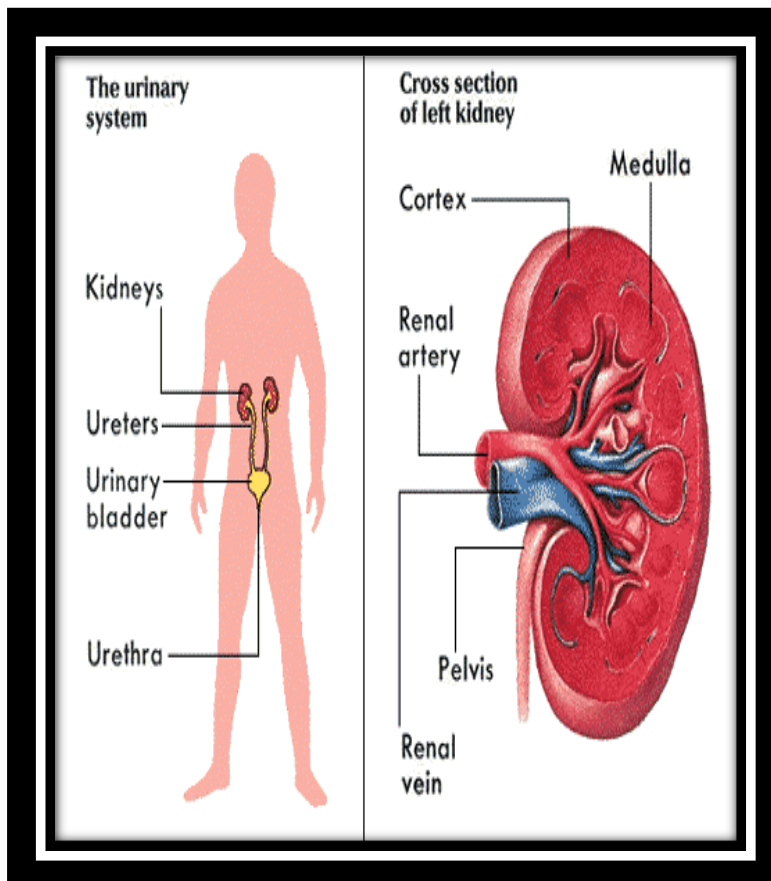
3. TUBULAR SECRETION:

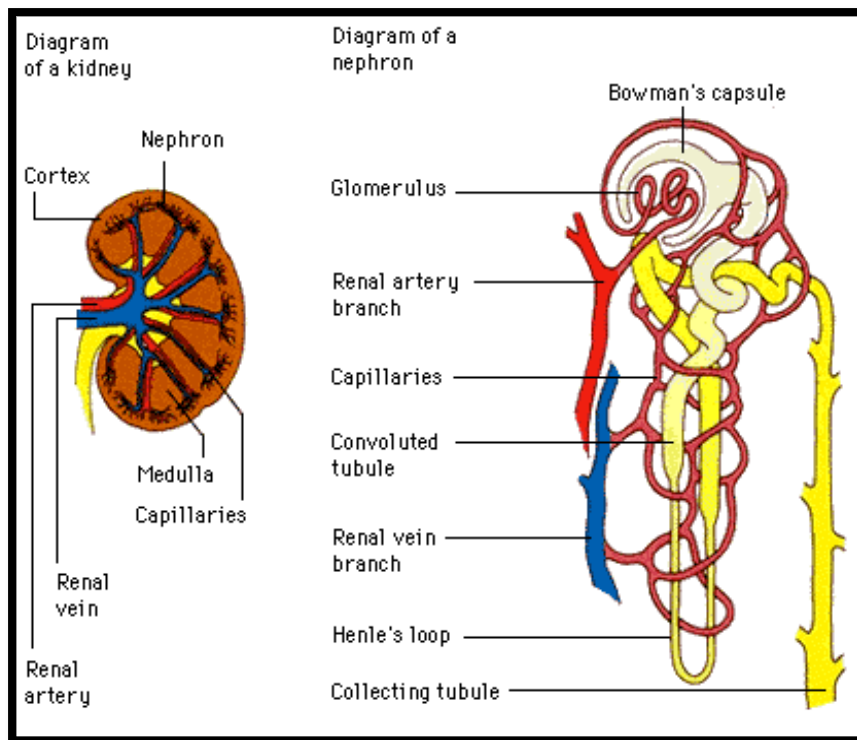
In the process urine formation, some substances are also secreted into the lumen from the peritubular capillaries through the tubular epithelial cells. This is known as tubular secretion or tubular excretion.

Substances secreted in different segments of renal tubules

1. Potassium is secreted actively by sodium-potassium pump in distal convoluted tubule and collecting duct.
2. Ammonia is secreted in the proximal convoluted tubule.
3. Hydrogen ions are secreted in the proximal and distal convoluted tubules. Maximum hydrogen ion secretion occurs in proximal tubule.

Thus, by the processes of glomerular filtration, selective reabsorption and tubular secretion urine is formed in the nephron. It is also concentrated by counter current mechanism and ADH. Finally, it passes through ureter into the urinary bladder and, is stored there until is voided out.





5.A.2. COLLECTION OF URINE SAMPLE

5.A.2.I. TYPES OF COLLECTION:

Laboratory urine specimens are classified by the type of collection conducted or by the collection procedure used to obtain the specimen.

5.A.2.II. RANDOM SPECIMEN:

- Specimen most commonly sent to the laboratory for analysis,
- Usually submitted for urinalysis and microscopic analysis,
- Pediatric specimens are generally of this type.
- Can be collected at any time.

5.A.2.III. FIRST MORNING SPECIMEN:

- Also called an 8-hour specimen.
- The first morning specimen is collected when the patient first wakes up in the morning, having emptied the bladder before going to sleep.
- Since the urine can be collected over any eight-hour period, collection is practical for patients who have atypical work/sleep schedules.

5.A.2.IV. MIDSTREAM CLEAN CATCH SPECIMEN:

- This is the preferred type of specimen for culture and sensitivity testing
- Because of the reduced incidence of cellular and microbial contamination.
- Patients are required to first cleanse the urethral area with a castile soap towel.
- The patient should then void the first portion of the urine stream into the toilet.
- These first steps significantly reduce the opportunities for contaminants to enter into the urine stream.
- The urine midstream is then collected into a clean container
- This method of collection can be conducted at any time of day or night.

5.A.2.V. TIMED COLLECTION SPECIMEN:

- 24 hour specimen
- Among the most commonly performed tests requiring timed specimens
- Measuring Creatinine, urine urea nitrogen, glucose, sodium, potassium, or analytes such as catecholamine and 17-hydroxysteroids that are affected by diurnal variations

5.A.2.VI. CATHETER COLLECTION SPECIMEN:

- when a patient is bedridden
- Insert a Foley catheter into the bladder through the urethra to collect the urine specimen.
- Collected directly from a Foley into an evacuated tube or transferred from a syringe into a tube or cup.

5.A.2.VII. SUPRAPUBIC ASPIRATION SPECIMEN:

- When a bedridden patient cannot be catheterized or a sterile specimen is required.
- The urine specimen is collected by needle aspiration through the abdominal wall into the bladder

5.A.2.VIII. PEDIATRIC SPECIMEN:

- For infants and small children,
- A special urine collection bag is adhered to the skin surrounding the urethral area.
- The urine is poured into a collection cup or transferred directly into an evacuated tube with a transfer straw.
- Urine collected from a diaper is not recommended

5.A.3. URINE COLLECTION PRODUCTS:

5.A.3.I.URINE COLLECTION CONTAINERS:

- Variety of shapes and sizes with lids.
- To protect healthcare personnel from exposure to the specimen
- protect the specimen from exposure to contaminants,
- Leak-resistant cups should be utilized.
- Some urine transport cup closures have special access ports that allow closed-system transfer of urine directly from the collection device to the tube.

5.A.3.II.PRESERVATIVES:

- should be added to the collection container before the urine collection begins
- Warning labels should be placed on the container.
- The least hazardous one should be selected.
- Some common 24-hour preservatives are hydrochloric acid, boric acid, acetic acid and toluene.

5.A.4. VOLUME:

- Adults normally 700-2500ml (1200ml) of urine is passed in 24 hours.
- Infants-300ml

5.A.4.I. POLYURIA:

When excess of urine is passed in 24 hours (>2500ml).

Causes of transient polyuria:

- Excessive intake of fluids
- Anxiety
- During convalescence esp., ., after fever
- Recovery from oedema
- diuretics
- Diabetes mellitus
- Diabetes insipidus
- Chronic nephritis
- Arteriosclerosis.

5.A.4.II. OLIGURIA

When less than 500ml of urine is passed in 24 hours.

Causes:

- Acute and sub acute nephritis
- Diarrhoea/vomiting
- Fever
- Hypotension
- Congestive cardiac failure
- Obstruction to the urinary passage.
- Acute renal failure.

5.A.4.III. ANURIA:

When there is almost complete suppression of urine (<150ml)in 24 hours.

Pre Renal Causes:

- Non obstructive type
- Hypotension

Renal Causes:

- Obstructive type
- Acute nephritis

- TB of both the kidneys
- Polycystic kidney.
- pyelonephritis
- Black water fever
- Incompatible blood transfusion
- Intravascular haemolysis
- Poisoning by turpentine, cantharides.

Post Renal Causes:

- Calculi in the urinary passage
- Carcinoma of ureteral orifice
- Carcinoma of uterus infiltrating both the ureters
- Pelvic or abdominal tumours.

5.A.4.IV. NOCTURIA:

When excess of urine is passed during night time (>500ml).

5.A.5. COLOUR:

Normally urine is clear, pale or straw coloured.



5.A.5.I. COLOURLESS URINE:

- Diabetes mellitus
- Diabetes insipidus
- Excess intake of water.

5.A.5.II. ORANGE COLOUR URINE:

- Increased urobilinogen.
- Concentrated urine.
- Jaundice.



5.A.5.III. RED COLOUR URINE:

- Haematuria
- Haemoglobinuria



5.A.5.IV. GREEN COLOUR URINE:

- Putrified sample.
- Phenol poisoning.
- Administration of carbolic acid.



5.A.5.V. BLUE COLOUR URINE:

Administration Of Methylene



5.A.5.VI.. MILKY URINE:

- Pus
- Fat
- UTI infection



5.A.5. ODOUR OF URINE:

- Normally urine has faint aromatic odour.

OTHER ODOUR OF URINE:

1. PUNGENT

It due to ammonia produced by bacterial contamination.

2. PUTRID:

It due to UTI.

3. FRUITY:

It due to ketoacidosis.

5.A.7. REACTION/PH:

It reflects ability of the kidney to maintain H^+ ions concentration in extra cellular fluid and plasma. It can be measured by PH indicator paper or by electronic PH meter.

Normal PH range 4.5-7 (average-5.0).

- Much of the variation is due to diet.
- High protein diets - more acidic urine.
- vegetarian diets - more alkaline urine

(Both within the typical range 4.5 - 8).

1.DIGITAL PH METER:



2. LITMUS PAPER METHOD:

4% Alcoholic solution of methyl red+ 5ml of urine.

Red colour-acidic

Orange-neutral

Yellow-alkaline.



5.A.8. SPECIFIC GRAVITY

This is the ratio of 1 ml volume of urine to that of weight of 1ml of distilled water. It depends upon the concentration of various particles/solutes in the urine. Specific gravity is used to measure the concentrating and diluting power of the kidney.

Normal specific gravity 1.003-1.030

Neonates-1.012

It can be used be measured by

Urinometer

Refractometer

Reagent strips.



Urino meter

1. Low Specific gravity

- Diabetes insipidus
- Chronic renal diseases
- Acute tubular necrosis
- Interstitial nephritis

2. High specific gravity:

- Fever
- Dehydration
- Albuminuria

- Hematuria
- CCF
- Acute nephritis
- Diabetes mellitus

5.A.9. COMPOSITION OF URINE:

- Approx. 95% of the volume of normal urine is due to water.
- The other 5% consists of solutes

1. ORGANIC MOLECULES:

- Urea
- Creatinine
- Uric acid
- Ammonia
- Purine bodies

2. INORGANIC MOLECULES:

- Sodium
- Potassium
- Chloride
- Magnesium
- Calcium
- Ammonium
- Phosphates

3. UREA EXCRETION INCREASED IN:

- High intake of protein diet
- Fever
- Diabetes mellitus
- Convalescence
- Poisoning like phosphorus and arsenic

4. UREA EXCRETION DIMINISHED IN:

- Starvation
- Chronic kidney diseases
- Liver cirrhosis

5. URIC ACID EXCRETION INCREASED IN:

- Myeloid leukaemia
- Acute fever
- Pneumonia
- Liver diseases

5. URIC ACID EXCRETION DECREASED IN:

- Quinine administration

7. CREATININE EXCRETION INCREASED IN:

- Pneumonia
- Typhoid
- Tetanus

8. CREATININE EXCRETION DECREASED IN:

- Anaemia
- Leukemia
- Thyrotoxicosis
- Advanced degeneration of kidney and liver
- Muscular atrophy

9. AMMONIA EXCRETION INCREASED IN:

- Ketosis
- Delayed chloroform poisoning
- Severe vomiting of pregnancy
- Liver cirrhosis.

10. CHEMICAL EXAMINATION:

Routine chemical examination of urine

- Protein
- Sugar
- Ketone bodies
- Occult blood

- Bile pigment
- Bile salt
- Urobilinogen

I. Test for Protein:

- Heat coagulation test
- Sulphosalicylic acid test
- Heller's test

II. Test for Sugar:

- Fehling's test
- Benedict's test

III. Test for Ketone Bodies:

- Rothera's test

IV. Test for Occult Blood:

- Guaiacum test
- Haematrix test

V. Test for Bile Pigments:

- Fouchet's test
- Gmelin's test

5.A.10. HAEMATURIA:

- Appearance of blood in urine
- Renal causes
- Nephritis
- Tuberculosis of kidney
- Hydronephrosis
- Malignancy
- Calculus

5.A.11. SESAME OIL:

Sesame oil (also known as gingelly oil or tir oil) is an edible vegetable oil derived from sesame seeds.

The oil from the nutrient rich seed is popular in alternative medicine-from traditional massages and treatments to modern day fads. Ancient Indian medical system perceives sesame oil to pacify stress related symptoms and on-going research indicates that the rich presence of anti-oxidants and poly-unsaturated fats in sesame oil could help in controlling blood pressure.

History:

Sesame seeds were one of the first crops processed for oil as well as one of the earliest condiments. In fact, the word 'ennai' that means oil in Tamil language has its roots in the Tamil words EL and NEI which mean sesame and fat.

1. ORGANIC SESAME OIL PROFILE:

Botanical Name - Sesame indicum

Origin - Mexico

Extraction – Expeller Pressed/Unrefined

Shelf life- 1 year

Specifications:

Colour - Golden brown

Odour - Nutty

Free fatty acids – 0.79%

Peroxide value- 1.26

Moisture-0.01%

Iodine value-109.8

Specific gravity-0.98

p^H – 4.26

2. FATTY ACIDS:

Linoleic – 44.91%

Oleic – 41.45%

Stearic-4.06%

Palmitic -7.83%

Nutritional value per 100 g (3.5 oz)	
Energy	3.699 kJ (884kcal)
Carbohydrate	0.00 g
Fat	100.00g
Saturated	14.200g
Monounsaturated	39.700 g
Polyunsaturated	41.700 g
Protein	0.00 g
Vitamin C	0.0 mg (0%)
Vitamin E	1.40 mg(9%)
Vitamin K	13.6 (13%)
Calcium	0 mg (0%)
Iron	0.00 mg (0%)
Magnesium	0 mg (0%)
Phosphorus	0 mg (0%)
Potassium	0 mg (0%)
Sodium	0 mg (0%)

5.B.BRONCHIAL ASTHMA

Asthma (in greek ‘panting’) is a common chronic inflammatory disease of the airways characterized by variable and recurring symptoms, reversible airflow obstruction, and bronchospasm.

Common symptoms include

- wheezing,
- coughing,
- chest tightness, and
- shortness of breath.

It is clinically classified according to the frequency of symptoms, forced expiratory volume in one second (FEV1), and peak expiratory flow rate. Asthma may also be classified as atopic (extrinsic) or non-atopic (intrinsic). Symptoms can be prevented by avoiding triggers, such as allergens and irritants, and by the use of inhaled corticosteroids. The prevalence of asthma has increased significantly since the 1970s. As of 2010, 300 million people were affected worldwide. In 2009 asthma caused 250,000 deaths globally. Asthma is characterized by recurrent episodes of wheezing, shortness of breath, chest tightness, and coughing. Symptoms are often worse at night and in the early morning or in response to exercise or cold air. Some people with asthma only rarely experience symptoms, usually in response to triggers, whereas others may have marked and persistent symptoms.

5.B.1.ASSOCIATED CONDITIONS

A number of other health conditions occur more frequently in those with asthma including: gastro-esophageal reflux disease (GERD), rhinosinusitis, and obstructive sleep apnea. Psychological disorders are also more common.

5.B.2 CAUSES

Asthma is caused by a combination of environmental and genetic factors. These factors influence both its severity and how responsive it is to treatment. It is believed that the recent increased rates of asthma are due to a combination of these environmental and epigenetic changes.

I.ENVIRONMENTAL

Many environmental factors have been associated with asthma's development and exacerbation including: allergens, air pollution, and other environmental chemicals. There is a relationship between exposure to air pollutants and the development of asthma. Smoking during pregnancy and after delivery is associated with a greater risk of asthma-like symptoms. Low air quality, from traffic pollution or high ozone levels, has been associated with both asthma development and increased asthma severity. Exposure to indoor volatile organic compounds may be a trigger for asthma; formaldehyde exposure, for example, has a positive association. Also, phthalates in PVC are associated with asthma in children and adults as are high levels of endotoxin exposure. Asthma is associated with exposure to indoor allergens. Common indoor allergens dust mites, cockroaches, animal dander, and mold. Efforts to decrease dust mites have been found to be ineffective. Certain viral respiratory infections may increase the risk of developing asthma when acquired as a young child including: *respiratory syncytial virus* and *rhinovirus*.

Certain other infections however may decrease the risk.

HYGIENE HYPOTHESIS

The hygiene hypothesis is a theory which attempts to explain the increased rates of asthma worldwide—increased rates of asthma are a direct and unintended result of reduced exposure, during childhood, to non-infectious bacteria and viruses in modern societies.

It's been proposed that the reduced exposure to bacteria and viruses is due, in part, to increased cleanliness and decreased family

II.GENETIC

CD14-endotoxin interaction based on CD14 SNP C-159T

Endotoxin levels	CC genotype	TT genotype
High exposure	Low risk	High risk
Low exposure	High risk	Low risk

Family history is a risk factor for asthma with many different genes being implicated. If one identical twin is affected, the probability of the other having the disease is ~25%.

By the end of 2005, 25 genes had been associated with asthma in six or more separate populations including: GSTM1, IL10, CTLA-4, SPINK5, LTC4S, IL4R and ADAM33 among others. Many of these genes are related to the immune system or to modulating inflammation. Even among this list of genes supported by highly replicated studies, results have not been consistent among all populations tested. In 2006 over 100 genes were associated with asthma in one genetic association study alone; more continue to be found. Some genetic variants may only cause asthma when they are combined with specific environmental exposures. The genetic trait CD14 single nucleotide polymorphism (SNP) C-159T and exposure to endotoxin (a bacterial product) is an example. Endotoxin exposure can come from several environmental sources including tobacco smoke, dogs, and farms. Risk for asthma, then, is determined by both a person's genotype and the level of endotoxin exposure.

5.B.3.MEDICAL CONDITIONS

A triad of atopic eczema, allergic rhinitis, and asthma is called atopy. The strongest risk factor for developing asthma is a history of atopic disease with asthma occurring at a much greater rate in those who have either eczema or hay fever. Asthma has been associated with the autoimmune disease vasculitis, Churg–Strauss syndrome. Individuals with certain types of urticaria may also experience symptoms of asthma. There is a correlation between obesity and the risk of asthma with both having increased in recent years. Several factors may be at play including decreased respiratory function due to a buildup of fat and the fact that adipose tissue leads to a pro-inflammatory state. Beta blocker medications such as propranolol may trigger asthma in those who are susceptible. Cardioselective beta-blockers, however, appear safe in those with mild or moderate disease. Other medications that can cause problems include: ASA, NSAIDs, and angiotensin-converting enzyme inhibitors.

5.B.4.EXACERBATION

Some individuals will have stable asthma for weeks or months and then suddenly develop an episode of acute asthma. Different individuals react differently to various factors. Most individuals can develop severe exacerbation from a number of triggering agents. Home factors that can lead to exacerbation of asthma include dust, animal dander (especially cat and dog hair), cockroach allergens and mold.

Perfumes are a common cause of acute attacks in women and children. Both virus and bacterial infections of the upper respiratory tract infection can worsen the disease. Psychological stress may worsen symptoms—it's thought that stress alters the immune system and thus increases the airway inflammatory response to allergens and irritants.

5.B.5.PATHOPHYSIOLOGY

Obstruction of the lumen of a bronchiole by mucoid exudate, goblet cell metaplasia, and epithelial basement membrane thickening in a person with asthma.

Asthma is the result of chronic inflammation of the airways which subsequently results in increased contractability of the surrounding smooth muscles. This among other factors leads to bouts of narrowing of the airway and the classic symptoms of wheezing. The narrowing is typically reversible with or without treatment. Occasionally the airways themselves change. The typical changes in the airway include an increase in eosinophils and thickening of the lamina reticularis. Chronically airway smooth muscle may increase in size along with an increase in the numbers of mucous glands in the airways. Other cell types involved include: T lymphocytes, macrophages, and neutrophils. There may also be involvement of other components of the immune system including: cytokines, chemokines, histamine, and leukotrienes among others.

5.B.6.DIAGNOSIS

There is currently no precise test for asthma with the diagnosis typically made based on the pattern of symptoms and response to therapy over time. A diagnosis of asthma should be suspected if there is a history of: recurrent wheezing, coughing or difficulty breathing and these symptoms occur or worsen due to exercise, viral infections, allergens or air pollution. Spirometry is then used to confirm the diagnosis. In children under the age of six the diagnosis is more difficult as they are too young for spirometry.

5.B.7.SPIROMETRY

Spirometry is recommended to aid in diagnosis and management. It is the single best test for asthma. If the FEV1 measured by this technique improves more than 12% following administration of a bronchodilator such as salbutamol this is supportive of the diagnosis. It however may be normal in those with a history of mild asthma, not currently acting up.

Single-breath diffusing capacity can help differentiate asthma from COPD. It is reasonable to perform spirometry every 1 or 2 years to follow how well a person's asthma is controlled.

OTHER

The methacholine challenge involves the inhalation of increasing concentrations of a substance that causes airway narrowing in those predisposed. If negative it means that a person does not have asthma; if positive, however, it is not specific for the disease.

Other supportive evidence includes: a $\geq 20\%$ difference in peak expiratory flow rate on at least three days in a week for at least two weeks, a $\geq 20\%$ improvement of peak flow following treatment with either salbutamol, inhaled corticosteroids or prednisone, or a $\geq 20\%$ decrease in peak flow following exposure to a trigger. Testing peak expiratory flow is more variable than spirometry, however, and thus not recommended for routine diagnosis. It may be useful for daily self-monitoring in those with moderate to severe disease and for checking the effectiveness of new medications. It may also be helpful in guiding treatment in those with acute exacerbations.

I.Exercise-induced

Exercise can trigger bronchoconstriction in both people with and without asthma. It occurs in most people with asthma and up to 20% of people without asthma. In athletes it occurs more common in elite athletes with rates varying from 3% for bobsled racer to 50% for cycling and 60% for cross-country skiing. Inhaled beta2-agonists do not appear to improve athletic performance among those without asthma however oral doses may improve endurance and strength.

II.Occupational

Asthma as a result of (or worsened by) workplace exposures is a commonly reported occupational disease. Many cases however are not reported or recognized as such. It is estimated that 5–25% of asthma cases in adults are work related. A few hundred different agents have been implicated with the most common being: isocyanates, grain and wood dust, colophony, soldering flux, latex, animals, and aldehydes. The employment associated with the highest risk of problems include: those who spray paint, bakers and those who process food,

nurses, chemical workers, those who work with animals, welders, hairdressers and timber workers.

5.B.8.DIFFERENTIAL DIAGNOSIS

Many other conditions can cause symptoms similar to those of asthma.

In children other upper airway diseases such as allergic rhinitis and sinusitis should be considered as well as other causes of airway obstruction including: foreign body aspiration, tracheal stenosis or laryngotracheomalacia, vascular rings, enlarged lymph nodes or neck masses. In adults, COPD, congestive heart failure, airway masses, as well as drug induced coughing due to ACE inhibitors should be considered. In both populations vocal cord dysfunction may present similarly.

Chronic obstructive pulmonary disease can coexist with asthma and can occur as a complication of chronic asthma. After the age of 65 most people with obstructive airway disease will have asthma and COPD. In this setting, COPD can be differentiated by increased airway neutrophils, abnormally increased wall thickness, and increased smooth muscle in the bronchi. However, this level of investigation is not performed due to COPD and asthma sharing similar principles of management: corticosteroids, long acting beta agonists, and smoking cessation. It closely resembles asthma in symptoms, is correlated with more exposure to cigarette smoke, an older age, less symptom reversibility after bronchodilator administration, and decreased likelihood of family history of atopy.

5.B.9.PULMONARY FUNCTION TESTS:

- **TLC** Total lung capacity: the volume in the lungs at maximal inflation
- **TV** Tidal volume: that volume of air moved into or out of the lungs during quiet breathing
- (VT indicates a subdivision of the lung; when tidal volume is precisely measured, as in gas exchange calculation, the symbol VT or V_T is used.)
- **RV** Residual volume: the volume of air remaining in the lungs after a maximal exhalation
- **ERV** Expiratory reserve volume: the maximal volume of air that can be exhaled from the end-expiratory position

- **IRV** Inspiratory reserve volume: the maximal volume that can be inhaled from the end-inspiratory level
- **IC** Inspiratory capacity: the sum of IRV and TV
- **IVC** Inspiratory vital capacity: the maximum volume of air inhaled from the point of maximum expiration
- **VC** Vital capacity: the volume equal to $TLC - RV$
- **V_T** Tidal volume: that volume of air moved into or out of the lungs during quiet breathing (VT indicates a subdivision of the lung; when tidal volume is precisely measured, as in gas exchange calculation, the symbol VT or V_T is used.)
- **FRC** Functional residual capacity: the volume in the lungs at the end-expiratory position $RV/TLC\%$ Residual volume expressed as percent of TLC
- **V_A** Alveolar gas volume
- **V_L** Actual volume of the lung including the volume of the conducting airway.
- **FVC** Forced vital capacity: the determination of the vital capacity from a maximally forced expiratory effort
- **FEV_t** Forced expiratory volume (time): a generic term indicating the volume of air exhaled under forced conditions in the first t seconds
- **FEV_1** Volume that has been exhaled at the end of the first second of forced expiration

5.B.10. Peak expiratory flow

Diagnostics



A peak flow meter issued in the UK.

The **peak expiratory flow (PEF)**, also called **peak expiratory flow rate (PEFR)** is a person's maximum speed of expiration, as measured with a **peak flow meter**, a small, hand-held device used to monitor a person's ability to breathe out air. It measures the airflow through the bronchi and thus the degree of obstruction in the airways.

I.Function

Peak flow readings are higher when patients are well, and lower when the airways are constricted. From changes in recorded values, patients and doctors may determine lung functionality, severity of asthma symptoms, and treatment options. First measure of precaution would be to check patient for signs and symptoms of asthmatic hypervolemia. This would indicate whether or not to even continue with the Peak Flow Meter procedure. Measurement of PEFr requires training to correctly use a meter and the normal expected value depends on a patient's sex, age and height. It is classically reduced in obstructive lung disorders such as asthma. Due to the wide range of 'normal' values and high degree of variability, peak flow is not the recommended test to identify asthma. However, it can be useful in some circumstances. A small proportion of people with asthma may benefit from regular peak flow monitoring. When monitoring is recommended, it is usually done in addition to reviewing asthma symptoms and frequency of reliever medication use.^L When peak flow is being monitored regularly, the results may be recorded on a peak flow chart. It is important to use the same peak flow meter every time.

II.Scale

This peak flow meter uses the EU scale. There are a number of non-equivalent scales used in the measurement of Peak Flow.

Zone Reading Description

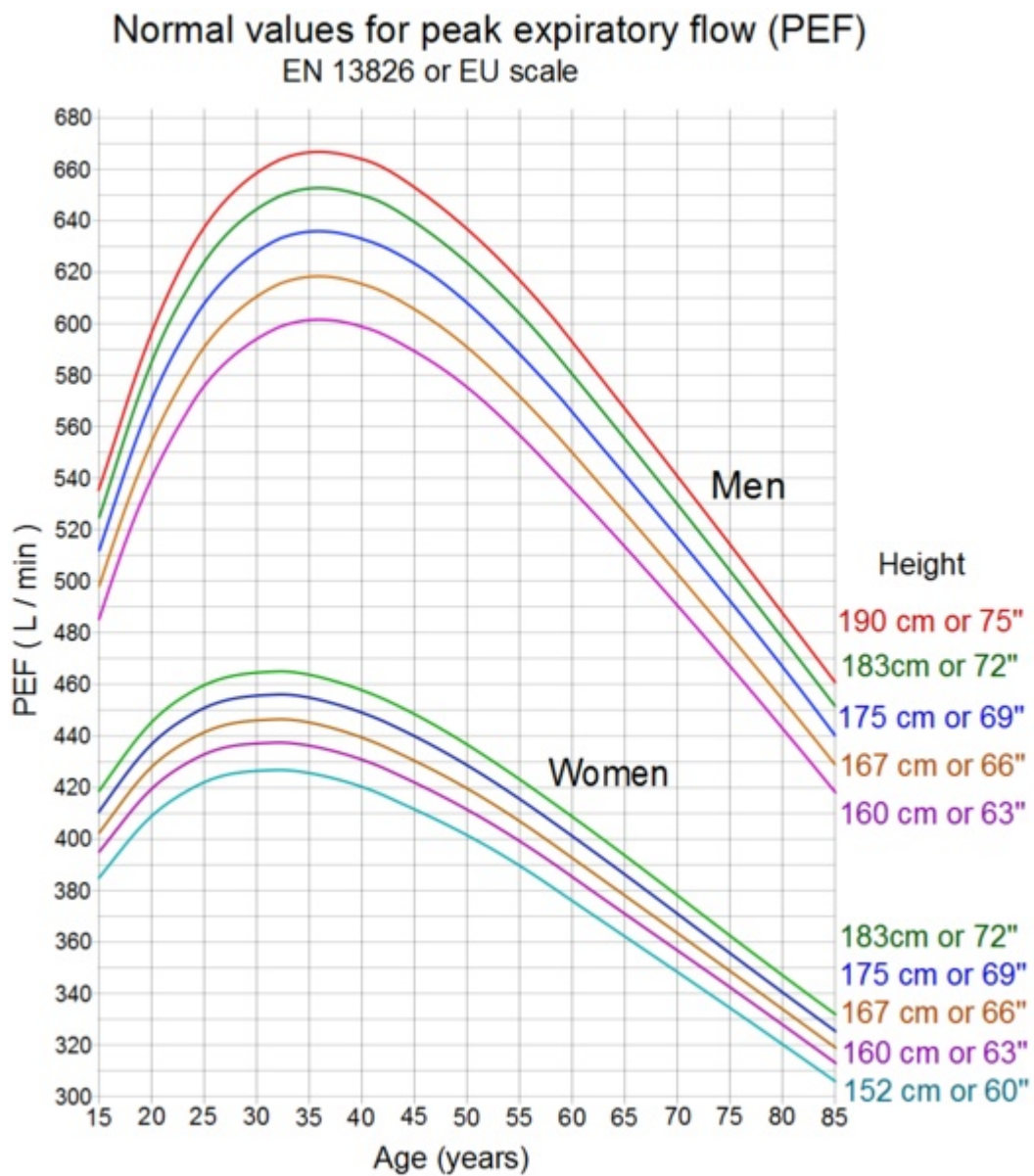
- Green Zone 80 to 100 percent of the usual or normal peak flow readings are clear. A peak flow reading in the green zone indicates that the asthma is under good control.
- Yellow Zone 50 to 79 percent of the usual or normal peak flow readings Indicates caution. It may mean respiratory airways are narrowing and additional medication may be required
- Red Zone Less than 50 percent of the usual or normal peak flow readings Indicates a medical emergency. Severe airway narrowing may be occurring and immediate action needs to be taken.

This would usually involve contacting a doctor or hospital. Zone Reading Description

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MATERIAL AND METHODS...

neerkkuri neikkuri

- Manthara Kaasam



“A STUDY ON NEERKKURI NEIKKURI DIAGNOSTIC METHODOLOGY IN MANTHAARA KAASAM – BRONCHIAL ASTHMA” would be carried out in the Out patients and In Patients NoiNaadal Department of Ayothidoss Pandithar Hospital of the National Institute of Siddha, Tambaram Sanatorium, and Chennai 47.

6.1. POPULATION SAMPLE:

Out of the 80 cases screened, 40 diagnosed cases will be selected from the outpatient department and 20 normal subjects screened, 10 normal subjects will be selected. The study would be followed under the supervision of the HOD and Lecturers of the Noi Naadal Department.

6.2. SAMPLE SIZE :

Total	: 50
Normal Healthy Volunteers	: 10
Manthaara kaasam patients	: 40

6.3. SELECTION OF CASES:

Selection of cases is based on the screening of patient population as per the inclusion and exclusion criteria listed out in the Screening Proforma.

The patient population consists of patients attending the OPD/IPD of Ayothidoss Pandithar Hospital of National Institute of Siddha, Chennai.

6.4. STUDY PERIOD : one year

6.5. INCLUSION CRITERIA:

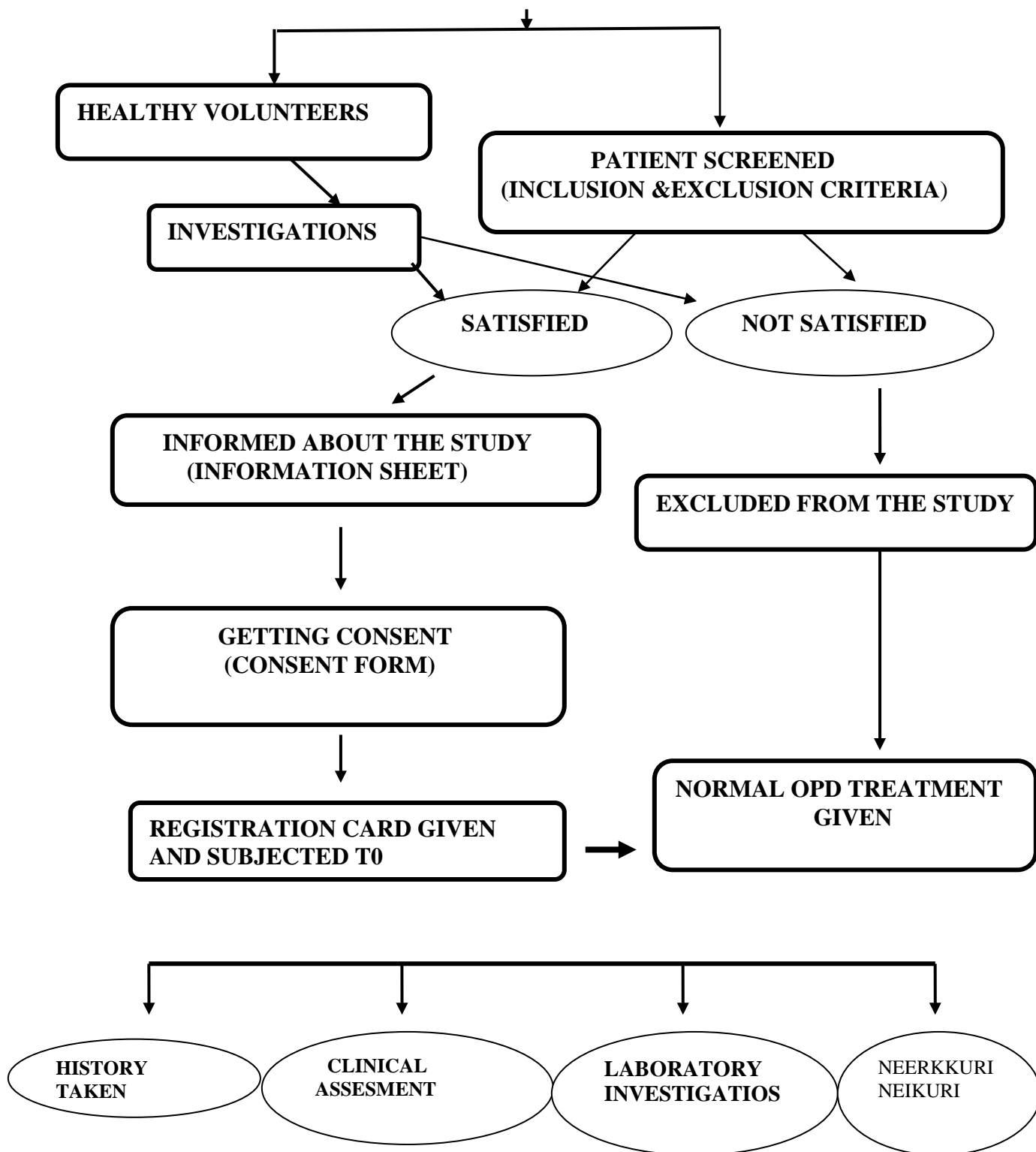
- Age -18 to 60 years
- Difficulty in breathing
- Wheezing
- Cough with mild expectoration
- Increased perspiration.

6.6.EXCLUSION CRITERIA:

- Lung carcinoma
- Tuberculosis
- Major systemic illness (DM, HT)
- Any vulnerable groups (Pregnancy, Lactation)

6.7. METHODOLOGY

METHODOLOGY



During examination, the cases were subjected to careful enquiry, which involved history taking and evaluate the siddha parameters and modern parameters.

6.9. SIDDHA PARAMETERS:

The seven body components (Udal thathukal)

Trihumoural theory (Mukkutram)

The eight-fold examination (Ennvagai thervu)

Naa

Niram

Mozhi

Vizhi

Malam

Moothiram (Neerkkuri and neikkuri)

Sparisam

Naadi

Wrist circummetric sign (Manikadai Nool),

Habitat (Nilam),

Season (Kalam)

Astrology (Sothidam) of the patient would be assessed.

6.9. 1 NEERKKURI NEIKKURI PROCEDURE

6.9.1.A. PREPARATION OF THE PATIENT:

DIET PATTERN:

Quality- Balanced type of food with appropriate proportion of all six tastes and humors.

Quantity- Upto the level of his appetite

SLEEP PATTERN

Sound sleep

6.9.1.B. METHOD OF URINE COLLECTION:

The mid stream urine should be collected in a sterilized container and it should be closed air tight.

6.9.1. C. NEERKKURI PROCEDURE:

In Neerkkuri, five physical properties of the urine should be noted. They are

1. Colour:

The colour of the urine should be noted with naked eye and the photos of the colour are documented.

2. Odour:

The odour of the urine should be noted.

3. Froth:

The patient should be enquired whether the froth present are not in the urine, immediately after collecting the mid stream urine.

4. Density:

Density of the urine should be measured by using urino meter

5. Deposits and volume:

Volume:

24 hours urine should be collected in the urinary container and the volume of the urine is noted.

6.9.1.D. P^H OF THE URINE:

The P^H of urine is measured by using the digital ph meter

6.9.1.E NEIKKURI PROCEDURE:

I. SOURCE OF OIL:

Oil will be procured from mill as freshly ground gingely seeds in mill stone (chekku) without any additives being added to avoid variations in the investigations.

Because the presently marketed Gingely oils are treated with additives for which the reason I have chosen the above method of additive free preparation.

II. SELECTION OF BOWL:

I have selected a glass bowl of 200 ml quantity with wide neck.

III. SELECTION OF STICK:

Coconut leaf mid rib.

IV. METHOD OF OIL INSTILLING:

Distance between the bowl& the oil stick is 3-4 cm. below 3cm, the stick may touch the bowl. Above 5cm,the oil may be dispersed due to air or it may cause ripples over the surface of the urine sample interfering with the results of the examination.

A drop of oil is dripped on centre of bowl without any shake. It should be ensured that the sunlight should fall on it, but it should not be disturbed by the wind.

The above Neikkuri procedure is repeated (except physical and chemical urine analysis) for the next two consecutive days .

V. OBSERVATION AND DOCUMENTATION OF NEIKKURI:

A keen observation with our knowledge on the oil drop suggests the condition of the patient and photos will be documented with standard Digital imaging.

5 slides of picture will be taken

1. 1 minute after dropping of oil.
2. After 3 minutes.
3. After 5 minutes.
4. After 7 minutes.
5. After 10 minutes.

6.10. MODERN PARAMETERS:

1. BLOOD:

Haemogram
Hb
ESR
RBC
TC
DC
Platelet count
Blood sugar
Urea
Creatinine
Cholesterol
HDL
LDL
VLDL
Alkaline phosphatase
Triglycerides
SGOT
SGPT
Total Bilirubin
Direct Bilirubin
Indirect Bilirubin.

2. URINE:

Albumin
Sugar
Acetone
Bile salt
Bile pigment
Urobilinogen
Occult blood
Urine deposits (Pus cells, Epithelial cells ,RBC, Crystals).
 p^H
Specific gravity

3. MOTION TEST:

Ova
Cyst
Occult blood

4. OTHERS:

Chest x-ray
Absolute Eosinophil Count
Peak Expiratory Flow Rate
Sputum AFB.

6.11. DATA MANAGMENT

- After enrolling the patient in the study, a separate file for each patient were beopened and all forms were filed in the file. Patient No. were entered on the top of file for easy identification and arranged in a separate rack at the concerned OPD unit. Whenever study patient visits OPD during the study period, the respective patient file were taken and necessary recordings were made at the case record form or other suitable form.
- The Data recordings were monitored for completion and compliance of patients by HOD .
- Any missed data found in during the study, it were collected from the patient, but the time related data were not be recorded retrospectively
- All collected data were entered using MS access/ excel software onto computer. Investigators were trained to enter the patient data and cross checked by SRO.

6.12. STATISTICAL ANALYSIS

All collected data were entered into computer using MS Access / MS Excel Software by the investigator .The data were analysed using STATA Software under the guidance of SRO (stat) ,NIS .The level of significance were be 0.05. Descriptive analysis were made and necessary tables / graphs generated to understand the profile of patients included in the study .The Statistical analysis for significance of different diagnostic Neerkkuri –Neikkuri were done . Student ‘t’ test and chi-square test , are proposed to be performed for quantitative and qualitative data .

6.13. ETHICAL ISSUES:

1. Patients will be examined and screened unbiased used.manner and will be subjected to the criteria
2. Informed consent will be obtained from the patient in writing, explaining in the understandable language to the patient.
3. The data collected from the patient will be kept confidentially. The patient will be explained about the diagnosis.
4. To prevent any infection, while collecting blood sample from the patient, only disposable syringes, disposable gloves, with proper sterilization of lab equipments will be Used.
- 5 . This study involves only the necessary investigations (mentioned in the protocol) and no other investigation would be done.
6. Patients will be subjected to X-ray investigation which has minimal risk of radiation at free of cost in NIS.
7. Normal treatment procedure followed in NIS will be prescribed to the study patients and the treatment will be provided at free of cost.
8. There will be no infringement on the rights of patient.

OBSERVATION AND RESULTS...

neerkkuri neikkuri

- Manthara Kaasam



OBSERVATION AND RESULTS - MANTHAARA KAASAM PATIENTS...

neerkkuri neikkuri

- Manthara Kaasam

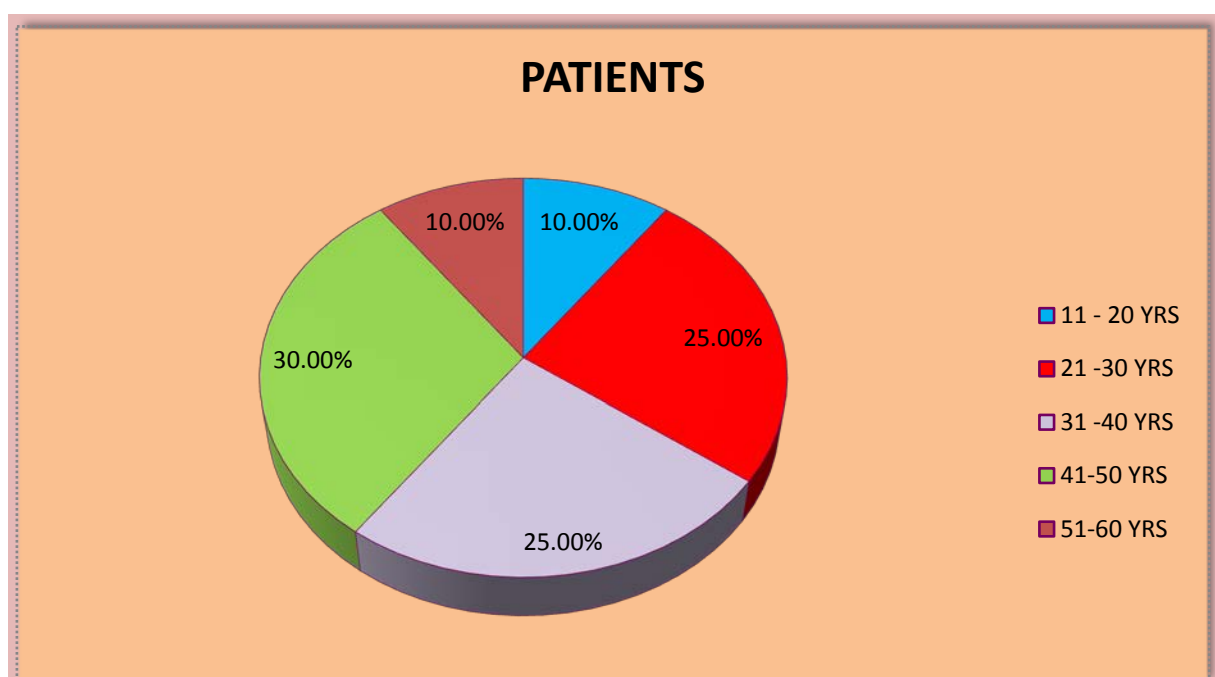


OBSERVATION AND RESULTS

7.A.MANTHAARA KASAM PATIENTS:

7.A.1. AGE DISTRIBUTION OF STUDY SAMPLE:

Age	No of cases	Percentage
11-20 Yrs	4	10%
21-30 Yrs	10	25%
31-40 Yrs	10	25%
41-50 Yrs	12	30%
51-60 Yrs	4	10%
Total	40	100%



Observation:

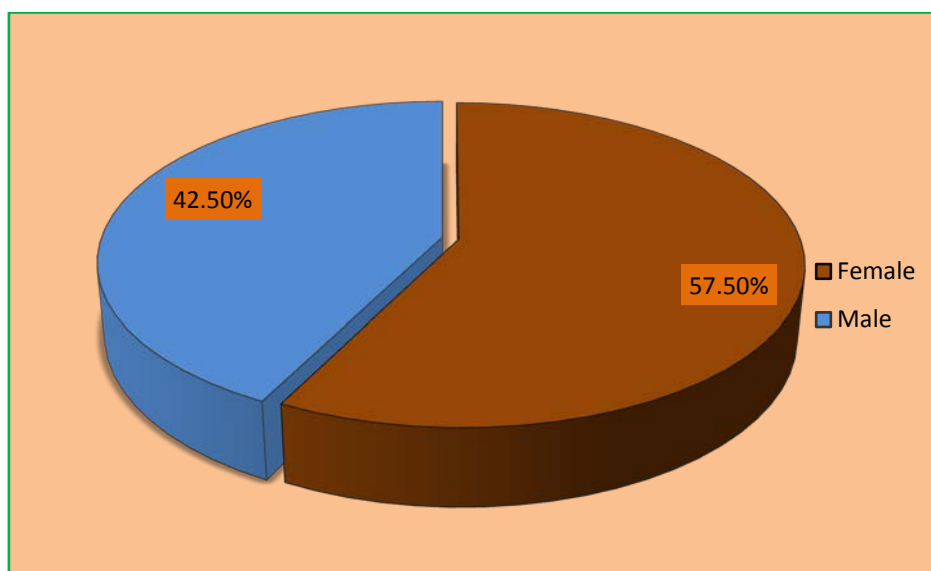
Among 40 cases, 10% of cases came under 11-20 yrs, 25% of cases came under 21-30 yrs, 25% of cases came under 31-40 yrs, 30% of cases came under 41-50 yrs, and 10% of cases came under 51-60 yrs.

Inference:

Majority of diseased cases (30%) in the study were of 41-50 yrs.

7.A.2. DISTRIBUTION OF GENDER:

Gender	Patients	
	No	Percentage
Female	23	57.5%
Male	17	42.5%
Total	40	100%



Observation:

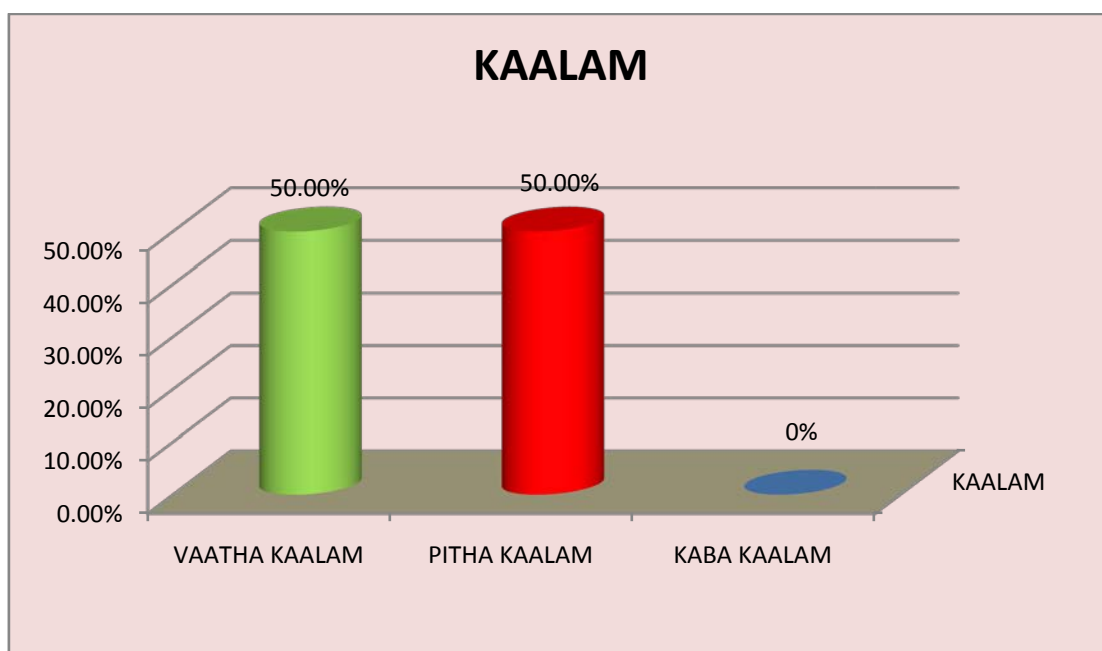
Among 40 cases, 57.5% of cases were female, 42.5% of cases were male.

Inference:

In the study, females are marginally more affected than males.

7.A.3. KAALAM DISTRIBUTION:

Kaalam	Patients	
	No of cases	Percentage
Vaatha kaalam (0 -33 yrs)	20	50%
Pitha kaalam (34- 66 yrs)	20	50%
Kaba kaalam (67-100 yrs)	0	0%
Total	40	100%



Observation:

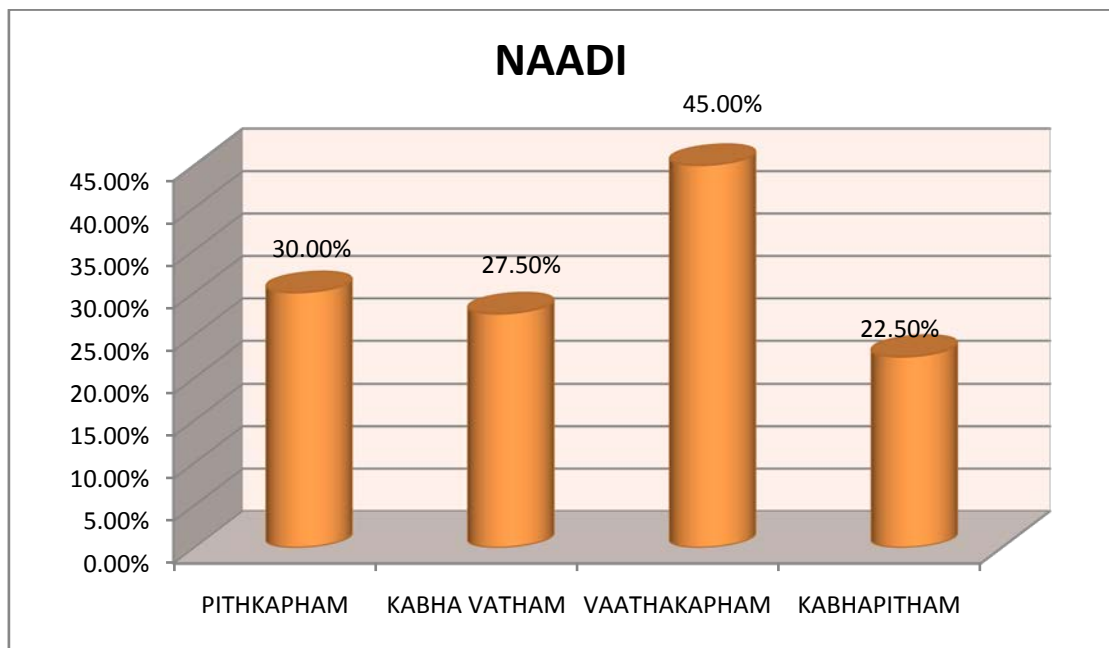
Among 40 cases, 50% of cases came under Vaatha kaalam i.e. 0-33yrs and 50% of cases fall under Pitha kaalam 34-66yrs.

Inference:

In the study, patients observed fell equally under Vaatha kaalam and Kaba kaalam.

8.4. NAADI (PULSE) :

Naadi	No of cases	Percentage
Pithakapham	12	30%
Kabhavatham	11	27.5%
Vaathakapham	18	45%
Kabhapitham	9	22.5%
Total	40	100%



Observation:

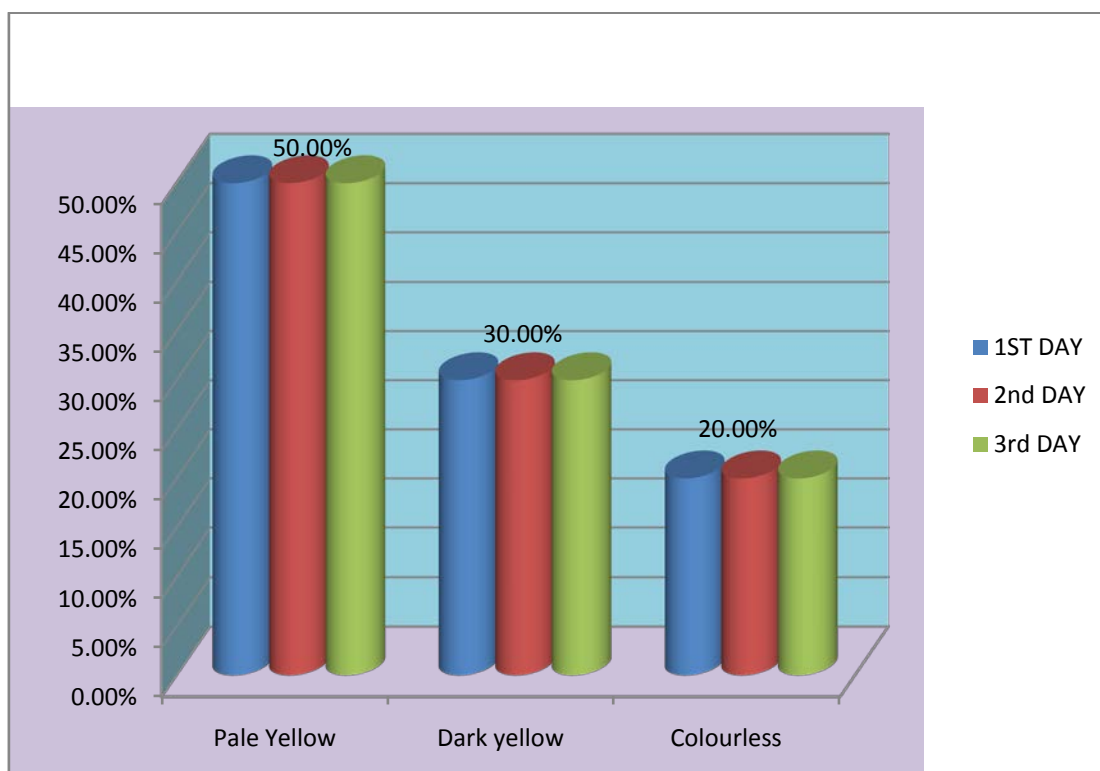
Among 40 cases, 45% of cases had Vaatha kapham, 30% of cases had the naadinadai of Pithakapham, 27.5% cases had Kabha vatham, and 22.5% of cases had Kabha pitham.

Inference:

Most of the cases had Vaathakapha Naadi. Manthaara kaasam disease is said to be associated with Vaathakapha Naadi.

7.A.5. COLOUR OF URINE:

COLOUR OF URINE	DAY 1		DAY 2		DAY 3	
	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE
PALE YELLOW	20	50%	20	50%	20	50 %
DARK YELLOW	12	30%	12	30%	12	30 %
COLOURLESS	8	7.5%	8	20%	8	20%
TOTAL	40	100%	40	100%	40	100%



Observation:

FIRST DAY:

Among 40 cases, the colours of the urine were 50% Pale yellow urine, 30% Dark yellow colour urine and 20% colourless urine.

SECOND DAY:

Among 40 cases, the colours of the urine were 50% Pale yellow urine, 30% Dark yellow colour urine and 20% colourless urine.

THIRD DAY:

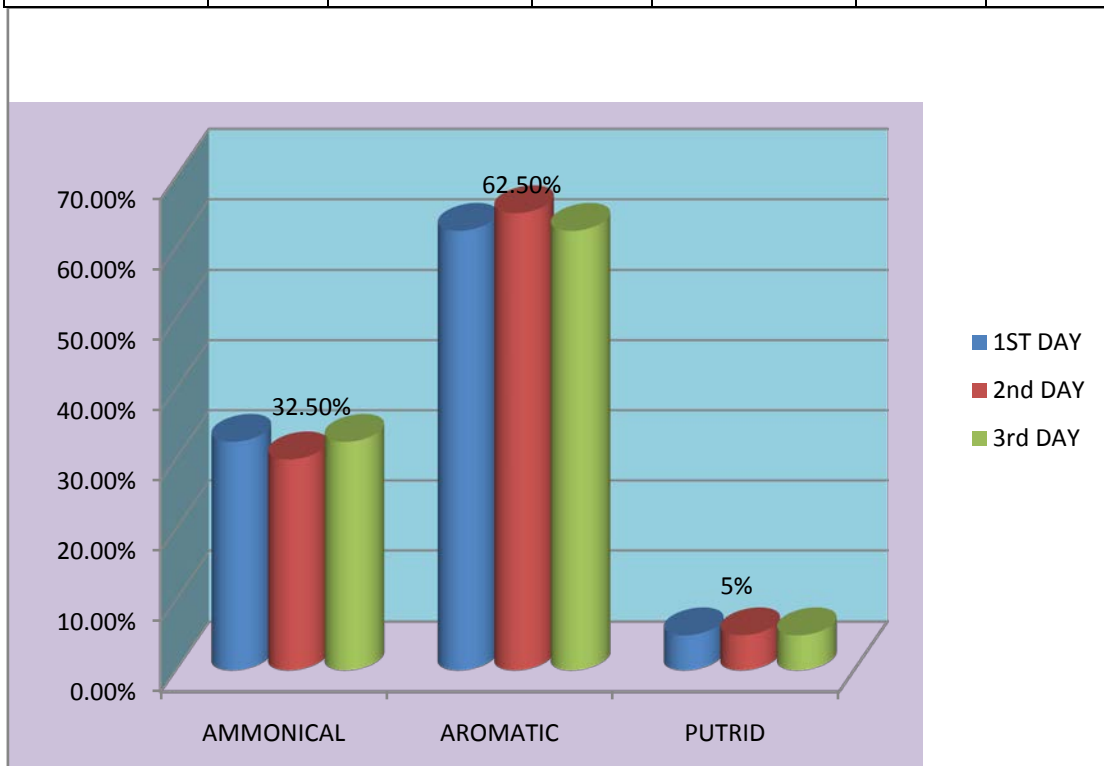
Among 40 cases, the colours of the urine were 50% Pale yellow urine, 30% Dark yellow colour urine and 20% colourless urine.

Inference:

In many of the cases, the colour of the urine was observed as pale yellow colour.

7.A.6. ODOUR OF URINE:

ODOUR	DAY 1		DAY 2		DAY 3	
	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE
AMMONICAL	13	32.5 %	12	30%	13	32.5 %
AROMATIC	25	62.5%	26	65%	25	62.5%
PUTRID	2	5%	2	5%	2	5%
TOTAL	40	100%	40	100%	40	100%



Observation:**Day 1:**

Among 40 cases, 62.5% of cases had Aromatic odour, 32.5% of cases had Ammonical odour in urine, and remaining 5% had Putrid Odour.

Day 2:

Among 40 cases, 65% of cases had Aromatic odour, 30 % of cases had Ammonical odour in urine, and remaining 5% had Putrid Odour.

Day 3:

Among 40 cases, 62.5% of cases had Aromatic odour, 32.5% of cases had Ammonical odour in urine, and remaining 5% had Putrid Odour

Inference:

In many of the cases, the odour of the urine observed were aromatic odour in three days. The odour obtained was normal.

7.A.7. SPECIFIC GRAVITY:

	DAY 1		DAY 2		DAY 3	
	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE
1.001-1.010	5	12.5%	5	12.5%	5	12.5%
1.011-1.015	9	22.5%	8	20%	9	22.5%
1.016-1.020	20	50%	20	50%	20	50%
1.021-1.030	6	15%	7	17.5%	6	15%
TOTAL	40	100%	40	100%	40	100%



Observation:

Day 1

Among 40 cases, 12.5% of cases had specific gravity between 1.001-1.010, 22.5% of cases had specific gravity between 1.011-1.015, 50% of cases had specific gravity between 1.016-1.020 and 15% of cases had specific gravity between 1.021- 1.030 .

Day 2

Among 40 cases, 12.5% of cases had specific gravity between 1.001-1.010, 20% of cases had specific gravity between 1.011-1.015, 50% of cases had specific gravity between 1.016-1.020 and 17.5% of cases had specific gravity between 1.021- 1.030 .

Day 3

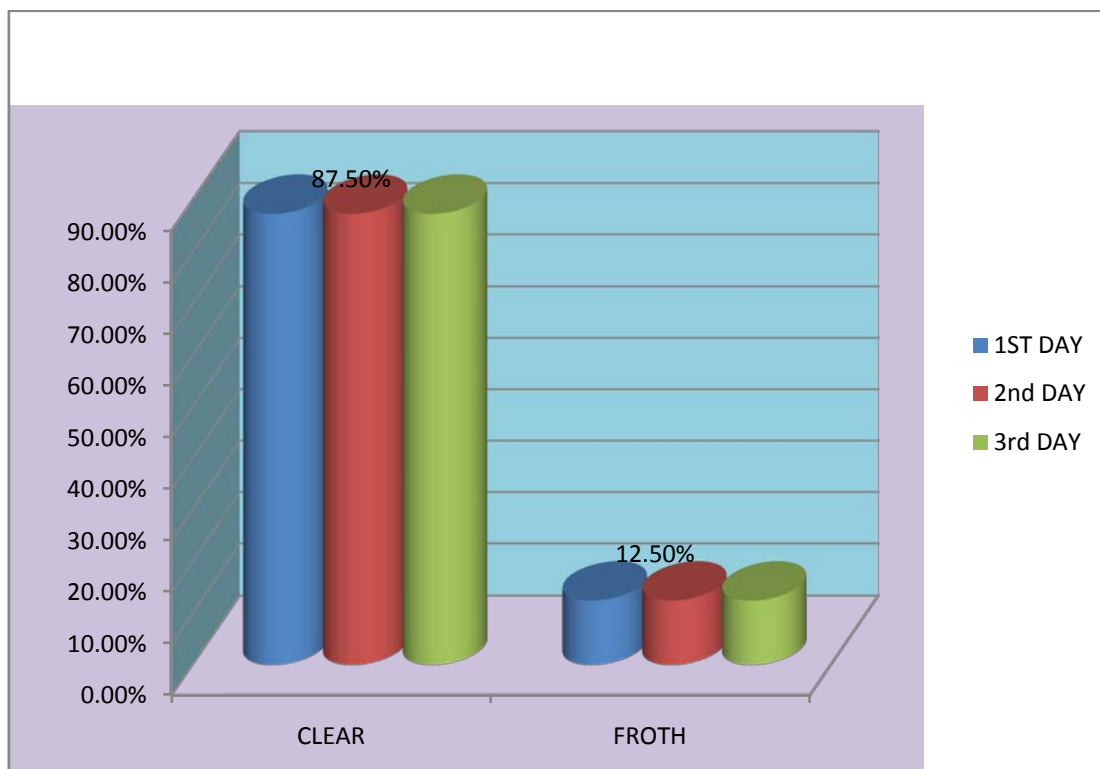
Among 40 cases, 12.5% of cases had specific gravity between 1.001-1.010, 22.5% of cases had specific gravity between 1.011-1.015, 50% of cases had specific gravity between 1.016-1.020 and 15% of cases had specific gravity.

Inference:

In many of the cases, the specific gravity of the urine observed was 1.016 – 1.020 in three days. The result obtained was normal.

7.A.8. FROTH:

FROTH	DAY 1		DAY 2		DAY 3	
	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE
CLEAR	35	87.5%	35	87.5%	35	87.5%
FROTH	5	12.5%	5	12.5%	5	12.5%
TOTAL	40	100%	40	100%	40	100%



Observation:

DAY 1

Among 40 cases the froth of the urine is absent in 87.5% and remaining 12.5% of urine had froth.

DAY 2

Among 40 cases the froth of the urine is absent in 87.5% and remaining 12.5% of urine had froth.

DAY 3

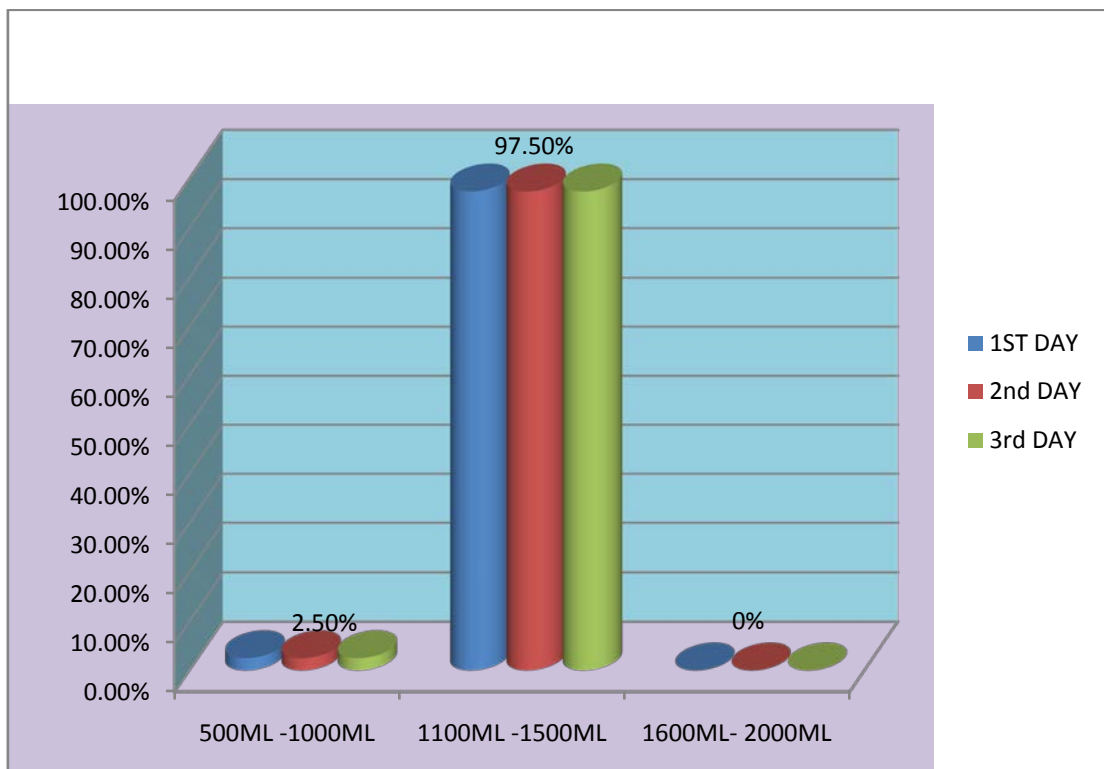
Among 40 cases the froth of the urine is absent in 87.5% and remaining 12.5% of urine had froth.

Inference:

In most of the cases, the froth is absent in the urine. The result obtained was normal.

7.A.9. VOLUME OF URINE:

VOLUME OF URINE	DAY 1		DAY 2		DAY 3	
	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE
500ML-1000ML	1	2.5%	1	2.5%	1	2.5%
1100ML -1500ML	39	97.5%	39	97.5%	39	97.5%
1600ML-2000ML	0	0%	0	0%	0	0%
TOTAL	40	100%	40	100%	40	100%



Observation:

Day 1:

Among 40 cases 97.5% of cases passed 1100ml -1500ml per day and remaining 5% of cases passed 500ml- 1000ml per day.

Day 2:

Among 40 cases 97.5% of cases passed 1100ml -1500ml per day and remaining 5% of cases passed 500ml- 1000ml per day

Day 3:

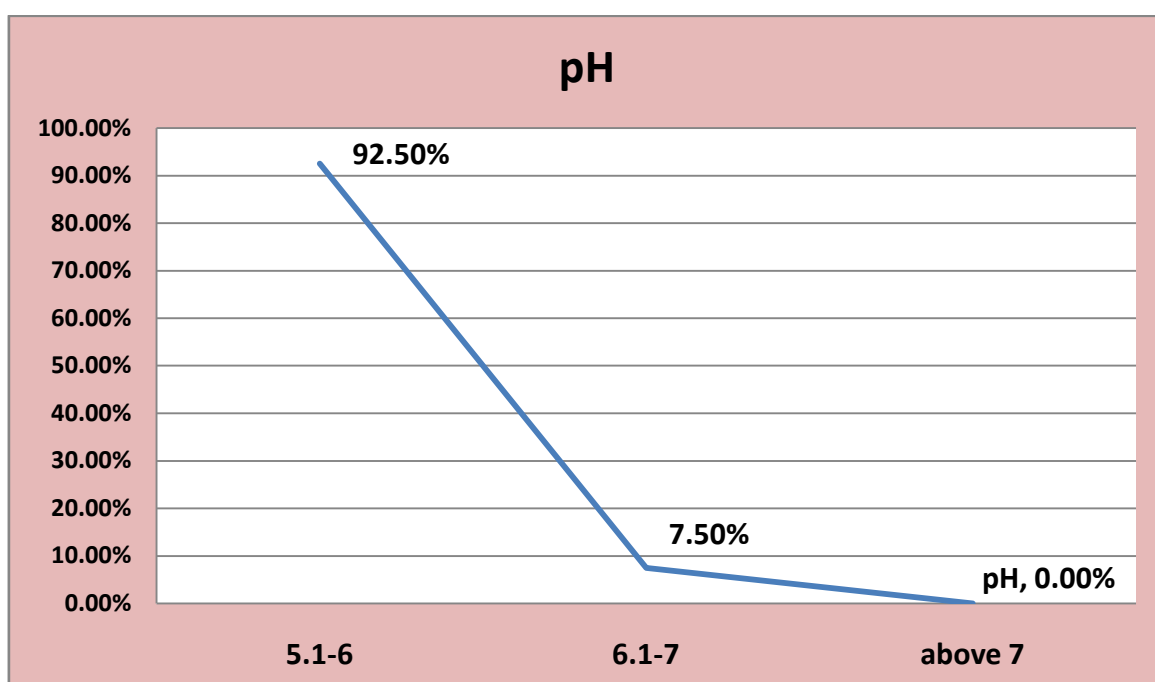
Among 40 cases 97.5% of cases passed 1100ml -1500ml per day and remaining 5% of cases passed 500ml- 1000ml per day

Inference:

In most of the cases, the volume of the urine passed per day was 1100ml - 1500ml. The result which is obtained was normal.

7.A.10. DIFFERENT RANGE OF P^H:

P ^H	No. of cases	Percentage
5-6	37	92.5%
6.1-7	3	7.5%
Above 7	0	0%
Total	40	100%



Observation:

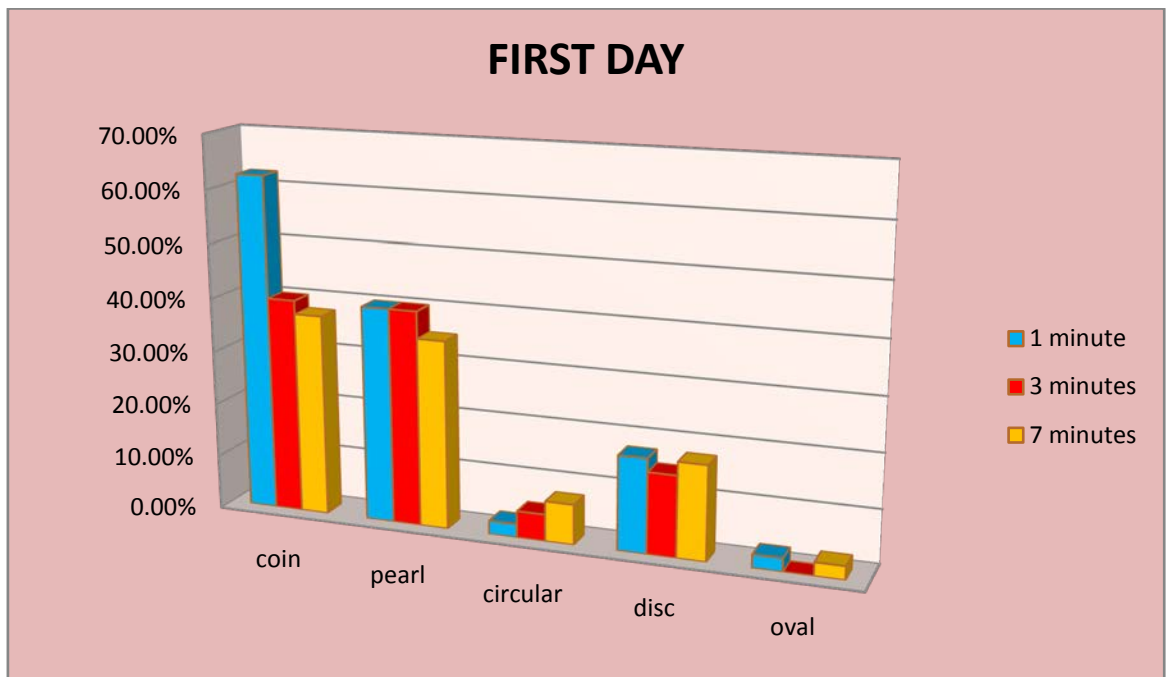
Among 40 cases, 92.5% of cases had P^H between 5.1 and 6, 7.5% of cases had P^H between 6.1 and 7, and none had P^H above 7.

Inference:

In most of the cases, the P^H value of the urine observed were between 5.1 – 6. The results obtained were normal.

7.A.11.DIFFERENT PATTERNS OF NEIKKURI: FIRST DAY

NEIKKURI PICTURE	1 MINUTE		3 MINUTES		7 MINUTES	
	NUMBER	PERCENTAGE	NUMBER	PERCENTAGE	NUMBER	PERCENTAGE
COIN	25	62.5%	16	40%	15	37.5%
PEARL	16	40%	16	40%	14	35%
CIRCULAR	1	2.5%	2	5%	3	7.5%
DISC	7	17.5%	6	15%	7	17.5%
OVAL	1	2.5%	0	0	1	2.5%
Total	40	100%	40	100%	40	100%



Observation:

Among the shapes of the Neikkuri observed in 40 cases, in one minute, 62.5% of cases had coin shape, 40 % of cases had pearl shape ,2. 5% of cases had circular shape, 17.5% of cases had disc shape, 2.5% of cases had oval shape.

In three minutes, 40% of cases had coin shape , 40 % of cases had pearl shape, 2% of cases had circular shape, 6% of cases had disc shape

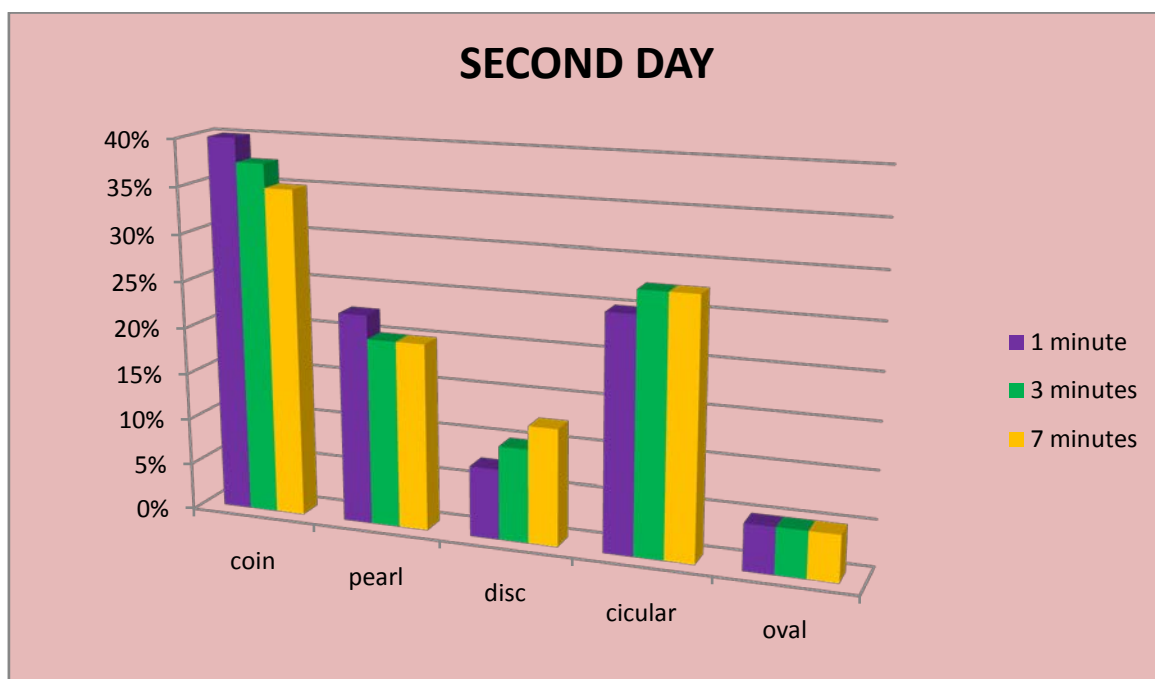
In seven minutes,37.5% of cases had coin shape , 35% of cases had pearl shape, 7.5% of cases had circular shape,17. 5% of cases had disc shapes, 2.5% of cases had oval shape.

Inference:

In most of the cases, the shape of the Neikkuri observed in one minute, three minutes and seven minutes were of coin and pearl shapes

7.A.12.DIFFERENT PATTERNS OF NEIKKURI: SECOND DAY

NEIKKURI PICTURE	1 MINUTE		3 MINUTES		7 MINUTES	
	NUMBER	PERCENTAGE	NUMBER	PERCENTAGE	NUMBER	PERCENTAGE
COIN	16	40%	15	37.5%	14	35%
PEARL	9	22.5%	8	20%	8	20%
DISC	3	7.5%	4	10%	5	12.5%
CIRCULAR	10	25%	11	27.5%	11	27.5%
OVAL	2	5%	2	5%	2	5%
TOTAL	40	100%	40	100%	40	100%



Observation:

Among the shapes of the Neikkuri observed in 40 cases, in one minute, 40% of cases had coin shape, 22.5 % of cases had pearl shape , 7.5% of cases had disc shapes, 25% of cases had circular shape, 5% of cases had oval shape.

In three minutes, 37.5% of cases had coin shape , 20 % of cases had pearl shape, 10% of cases had circular shape , 27.5% of cases had disc shape, 5% of cases had oval shape.

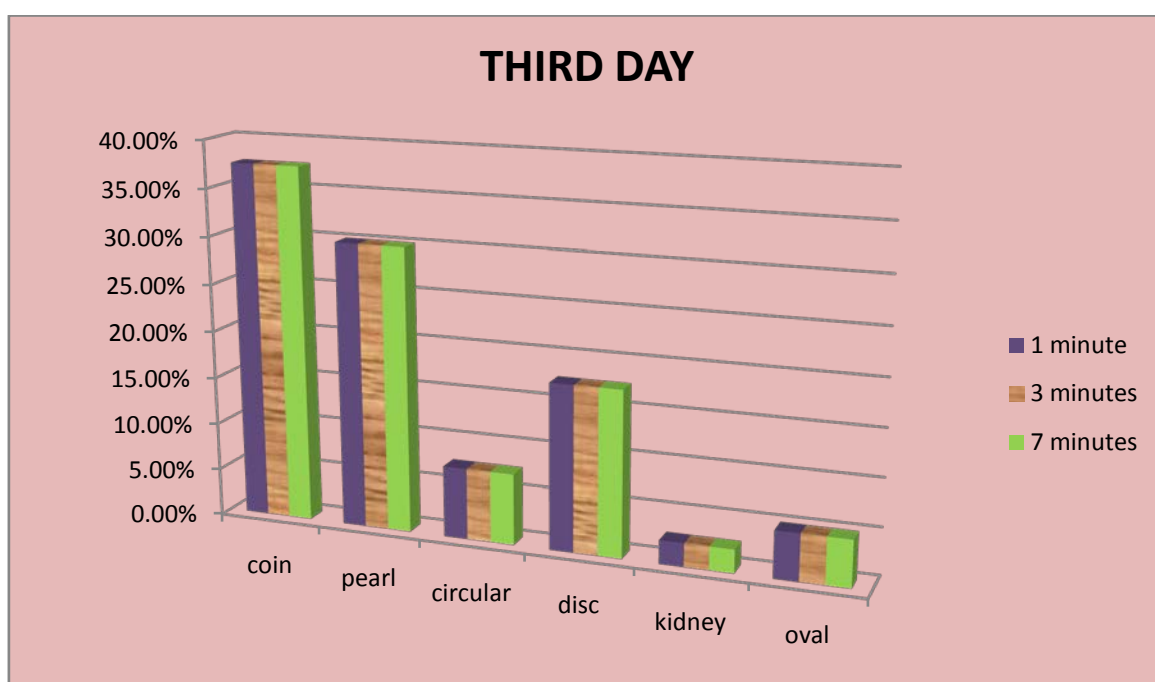
In seven minutes, 35% of cases had coin shape, 20% of cases had coin and disc shape, 12.5% of cases had disc shape, 27.5% of cases had circular shape, 5% of cases had oval shape.

Inference:

In most of the cases, the shape of the Neikkuri observed in one minute, three minutes and seven minutes were of coin and circular shapes.

7.A.13.DIFFERENT PATTERNS OF NEIKKURI: THIRD DAY

NEIKKURI PICTURE	1 MINUTE		3 MINUTES		7 MINUTES	
	NUMBER	PERCENTAGE	NUMBER	PERCENTAGE	NUMBER	PERCENTAGE
COIN	15	37.5%	15	37.5%	15	37.5%
PEARL	12	30%	12	30%	12	30%
CIRCULAR	3	7.5%	3	7.5%	3	7.5%
DISC	7	17.5%	7	17.5%	7	17.5%
KIDNEY	1	2.5%	1	2.5%	1	2.5%
OVAL	2	5%	2	5%	2	5%
Total	40	100%	40	100%	40	100%

**Observation:**

Among the shapes of the Neikkuri observed in 40 cases, in one minute, 37.5% of cases had coin shape, 30 % of cases had pearl shape, 7.5% of cases had circular shape, 17.5% of cases had disc, 2.5% of cases had kidney shape, 5% of cases had oval shape.

In three minutes, , 37.5% of cases had coin shape, 30 % of cases had pearl shape, 7.5% of cases had circular shape, 17.5% of cases had disc, 2.5% of cases had kidney shape,5% of cases had oval shape.

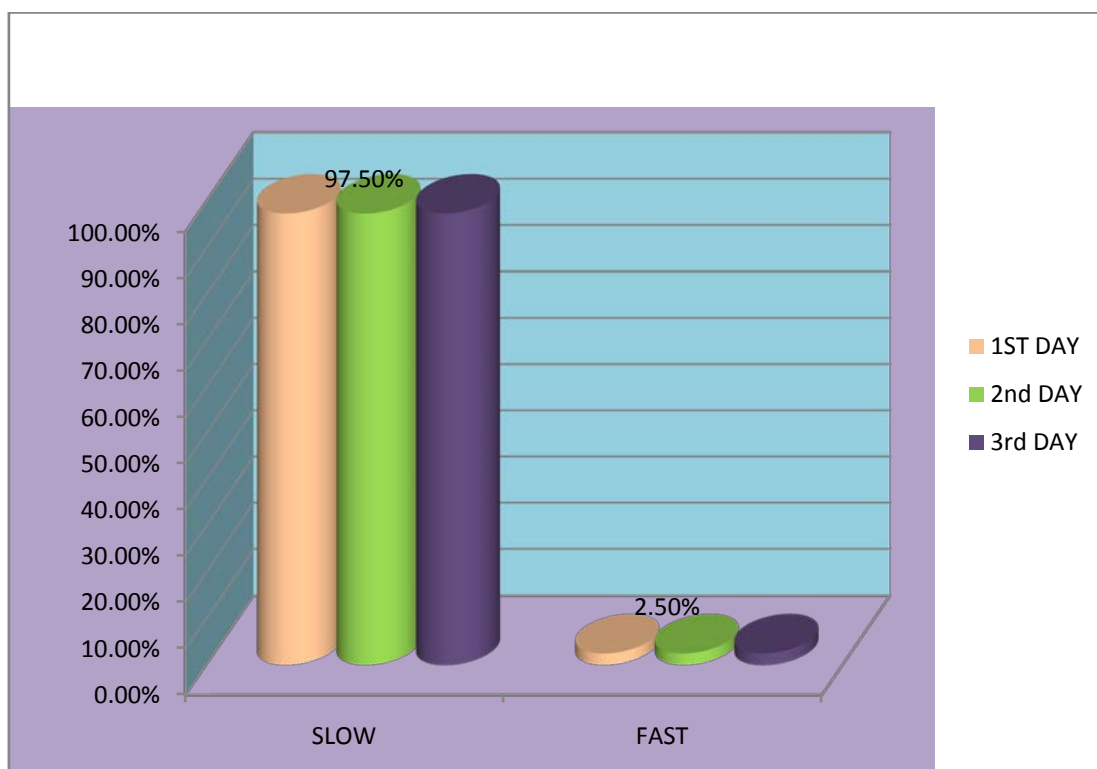
In seven minutes, , 37.5% of cases had coin shape, 30 % of cases had pearl shape, 7.5% of cases had circular shape, 17.5% of cases had disc, 2.5% of cases had kidney shape,5% of cases had oval shape

Inference:

In most of the cases, the shape of the Neikkuri observed in one minute, three minutes and seven minutes were of coin and pearl shapes.

7.A.14.DISSEMINATION DYNAMICS OF OIL DROP:

SPREADING	FIRST DAY		SECOND DAY		THIRD DAY	
	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE
SLOW	39	97.5%	39	97.5%	39	97.5%
FAST	1	2.5%	1	2.5%	1	2.5%
TOTAL	40	100%	40	100%	40	100%



Observation:

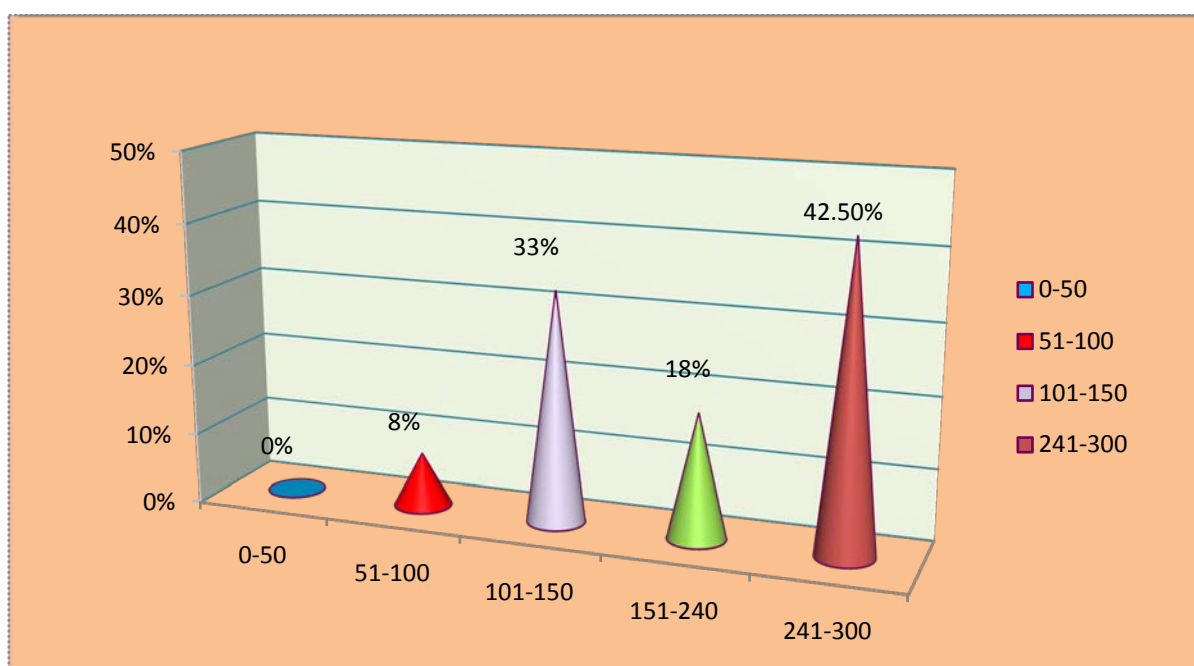
Among 40 cases, the spreading nature of the urine in the first day, 97.5% had slow spreading and 2.5% had fast spreading. In the second day, 97.5% had slow spreading, and 2.5% had fast spreading. In the third day, 97.5% had slow spreading, and 2.5% had fast spreading.

Inference:

In most of the cases the dissemination dynamics of oil drop observed were slowly spreading. It indicates good prognosis.

7.A.15. PEAK EXPIRATORY FLOW RATE:

S.No.	PEFR (L/min)	No of cases	Percentage
1.	0 - 50	0	0%
2.	51 - 100	3	7.5%
3.	101 - 150	13	32.5%
4.	151 – 240	7	17.5%
5.	241 - 300	17	42.5%
	Total	40	100%



Observation:

Among 40 cases, the peak expiratory flow rate of 42.5% of cases are 201-250L /minute ,32.5 % of cases had 101-150 L/minute, 17.5% of the cases had 151-200 and 7.5% of cases had 51-100 L/minute.

Inference

The peak expiratory flow rate of majority of diseased cases (42.5%) in the study had 201-250L/minute

7.A.16. REFERENCE PEAK EXPIRATORY FLOW RATE:

Reference value as per EU Scale

For Male : 450 L/min

For Female : 400 L/min

PEFR observed in healthy volunteers for female : **300L/min***

PEFR observed in healthy volunteers for male : **350L/min***

*The above values are the average PEFR values observed in healthy volunteers .

Female:

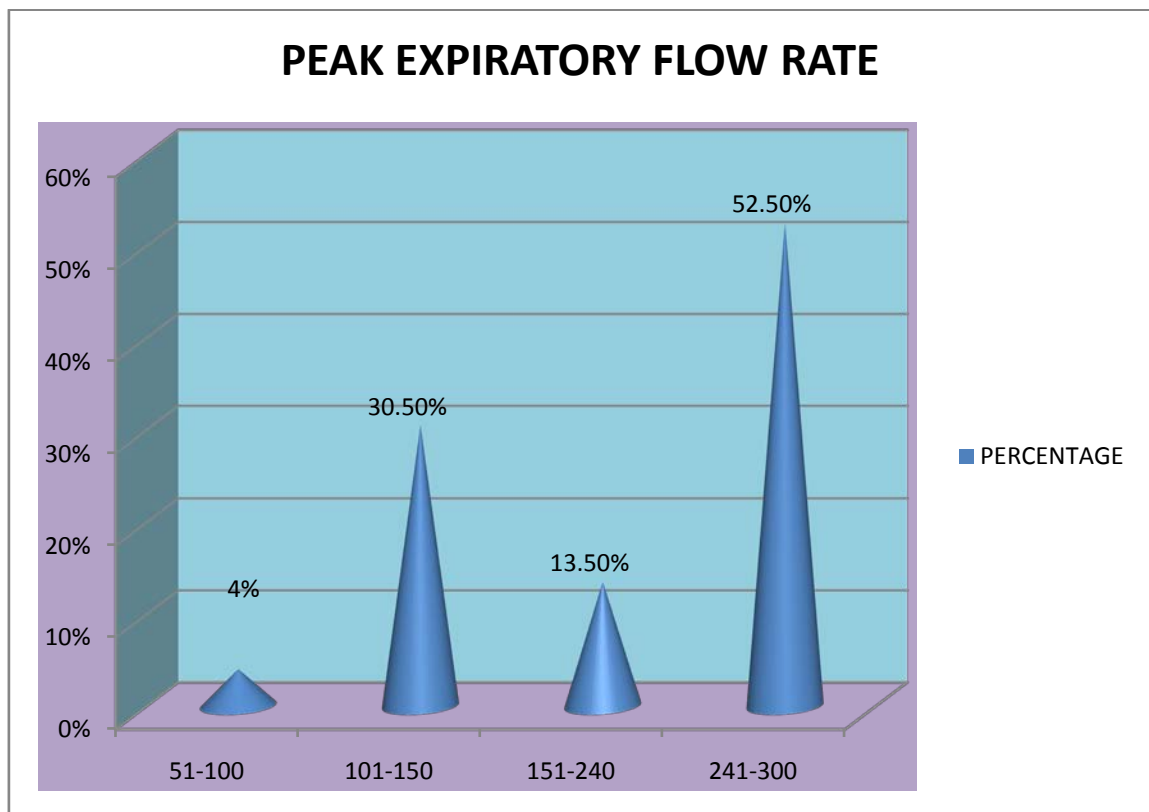
S .No	Zones of BA	Reference PEFR
1.	Green	240 – 300 L/min
2.	Yellow	150 – 240 L/min
3.	Red	Below 150 L/min

Male:

S .No	Zones of BA	Reference PEFR
1.	Green	280 – 350 L/min
2.	Yellow	175 – 200 L/min
3.	Red	Below 175 L/min

7.A.17. PEAK EXPIRATORY FLOW RATES FOR FEMALE CASES:

S .No	PEFR (L/min)	No of cases	Percentage
1.	51-100	1	4%
2.	101-150	7	30.5%
3.	151-240	3	13.5%
4.	241-300	12	52.5%
5.	Total	23	100%



Observation:

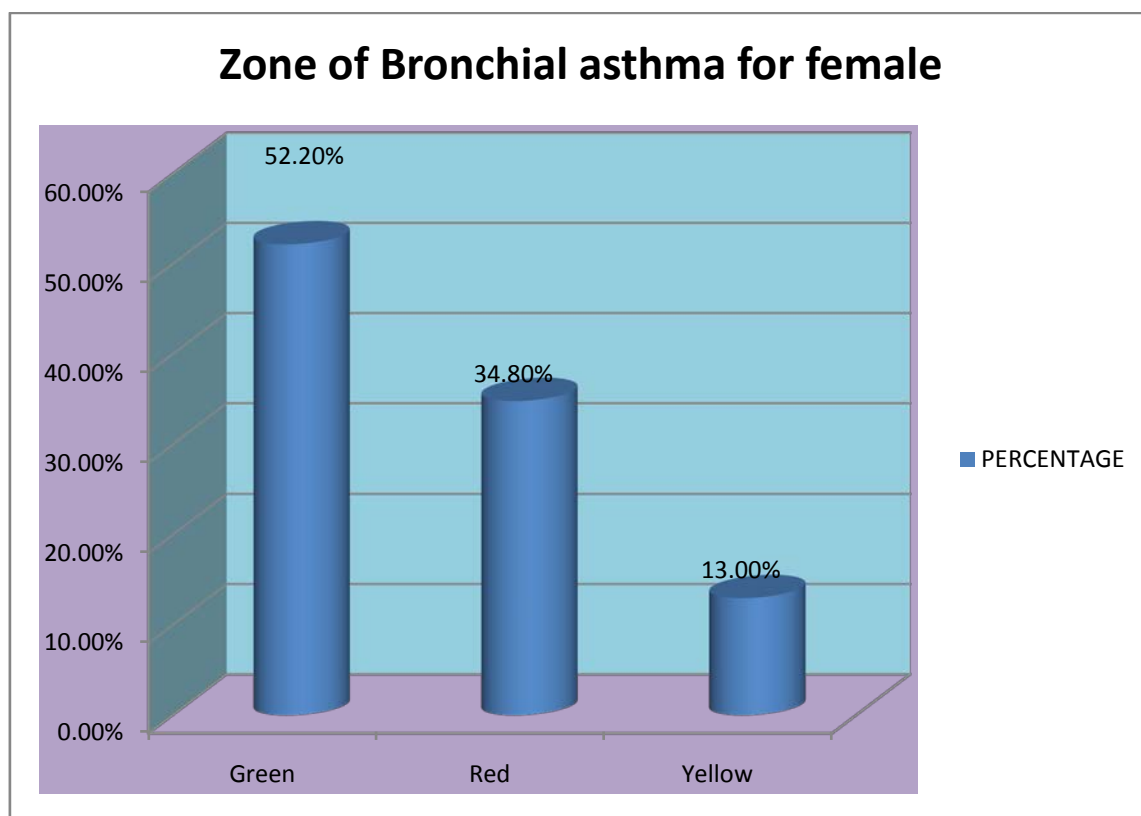
Among 23 cases, the Peak expiratory flow rate is between 201-250 for 52.5% of cases, 101-150 for 30.5%, 151-200 for 13.5%, 51-100 for 4% of cases.

Inference:

In many of the cases (52.5%), the Peak expiratory flow rate is 201-250 L/minute

7.A.18. ZONE OF BRONCHIAL ASTHMA FOR FEMALE CASES:

S.No	Zones of BA	No of cases	Percentage
1.	Green	12	52.2%
2.	Red	8	34.8%
3.	Yellow	3	13%
4.	Total	23	100%



Observation:

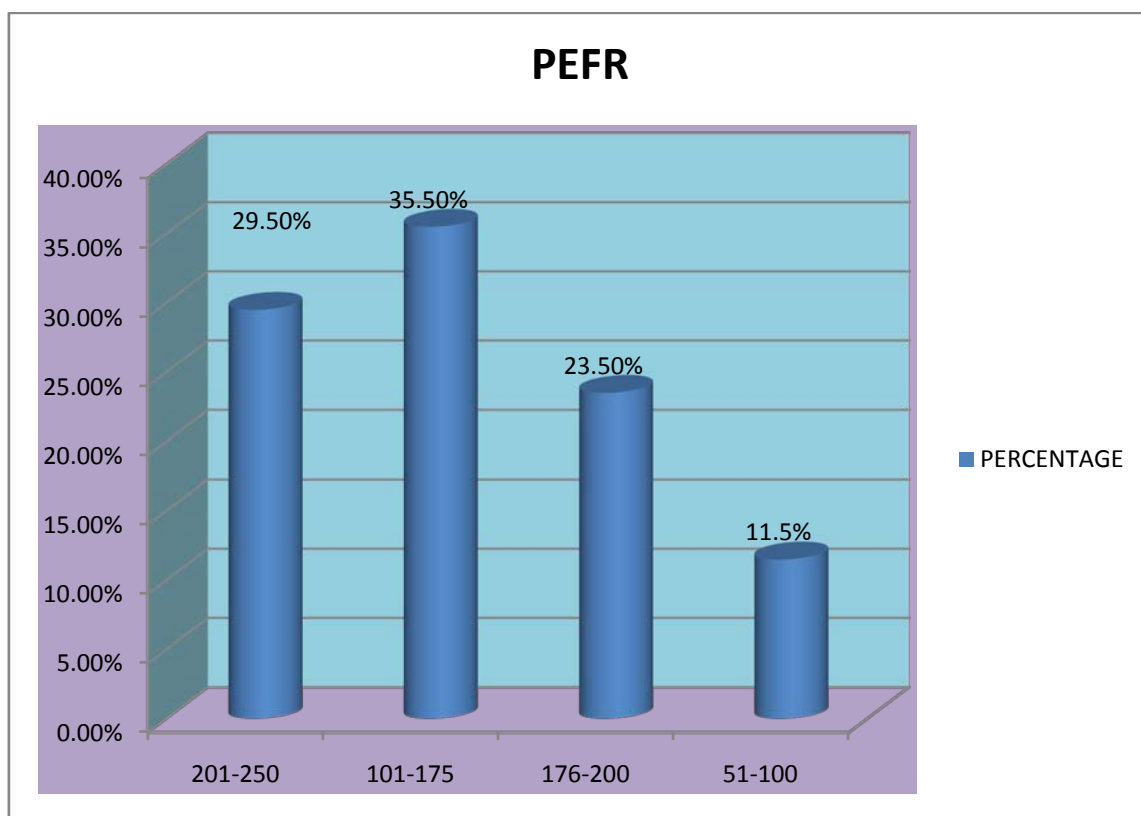
Among 23 cases, the zone of BA was green for 52.2% of cases, red for 34.8%, and yellow for 13% of cases.

Inference:

In most of the cases (52.2%), the zone of BA was green.

7.A.19. PEAK EXPIRATORY FLOW RATES FOR MALE CASES:

S.No	PEFR (L/min)	No of cases	Percentage
1.	51-100	2	11.5%
2.	101-150	6	35.5%
3.	151-175	4	23.5%
4.	176-250	5	29.5%
5.	Total	17	100%



Observation:

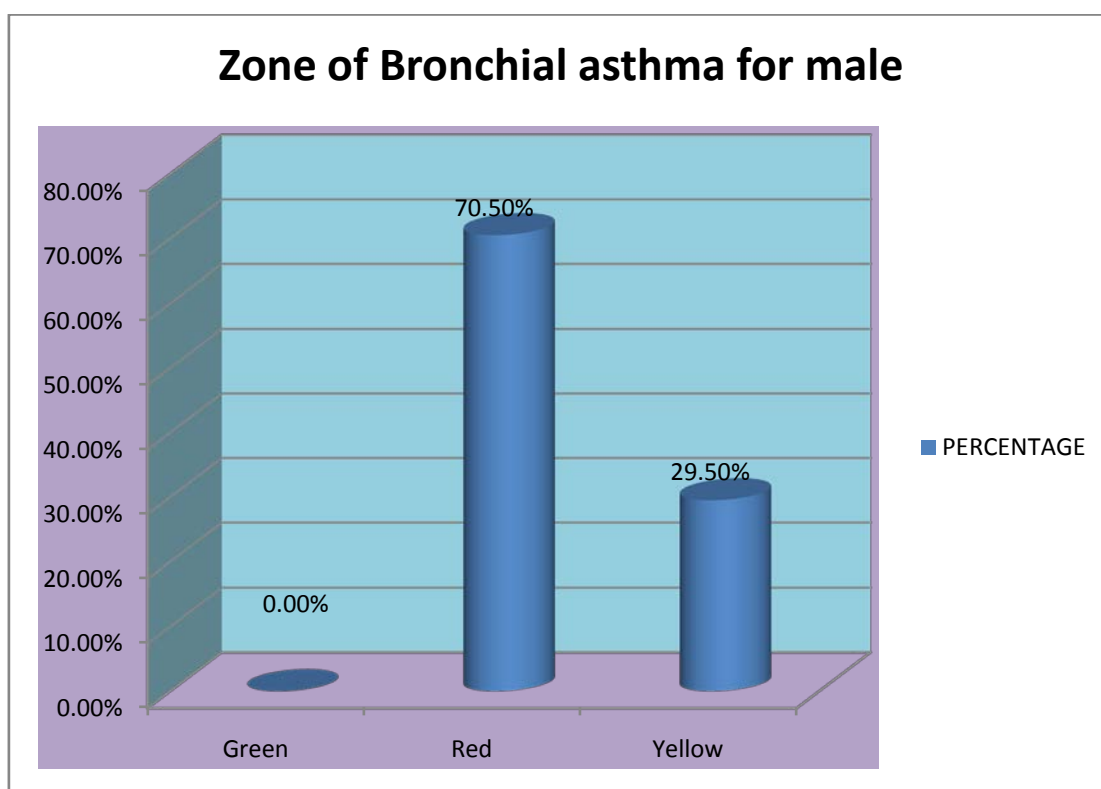
Among 17 cases, the PEFR is between 201-250 for 29.5% of cases, 101-150 for 35.5%, 151-200 for 23.5%, 51-100 for 12% of cases.

Inference:

In most of the cases (35.5%), the PEFR is 101-150 L/minute.

7.A.20. ZONE OF BRONCHIAL ASTHMA FOR MALE CASES:

S.No	Zones of BA	No of cases	Percentage
1.	Green	0	0%
2.	Red	12	70.5%
3.	Yellow	5	29.5%
4.	Total	17	100%



Observation:

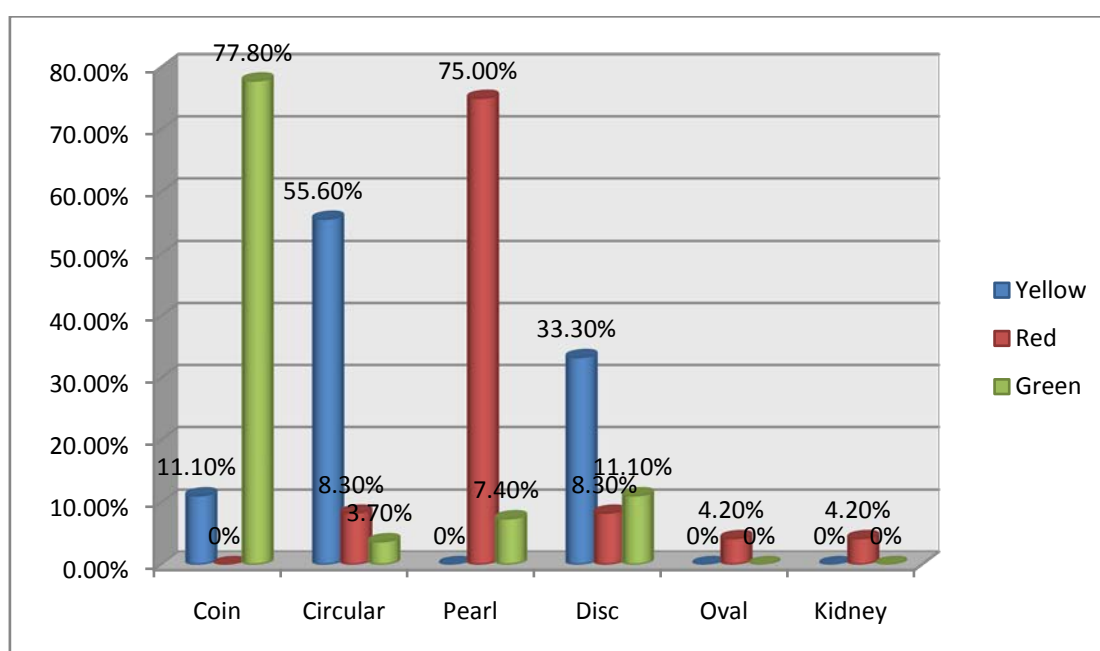
Among 17 cases, the zone of BA was red for 70.5% of cases and yellow for 29.5% of cases.

Inference:

In most of the cases (52.2%), the zone of BA was green.

7.A.21. NEIKURI IN FEMALE CASES:

Neikuri	Zones of Bronchial asthma		
	Green	Yellow	Red
Coin	77.8%	11.1%	0%
Circular	3.7%	55.6%	8.3%
Pearl	7.4%	0%	75.0%
Disc	11.1%	33.3%	8.3%
Oval	0%	0%	4.2%
Kidney	0%	0%	4.2%
Total	100%	100%	100%



Observation:

The following are the neikuri pattern results observed among 23 female cases.

In cases with green zone of BA, 77.8% of cases showed Coin shape, 3.7% showed Circular shape, 7.4% showed Pearl and 11.1% of cases showed disc shape.

In cases with Yellow zone of BA, 11.1% of cases showed Coin shape, 55.6% showed Circular shape and 33.3% showed disc shape.

In cases with red zone of BA, 8.3% of cases showed Disc shape, 8.3% showed Circular shape and 75% showed Pearl, 4.2% showed oval shape and 4.4% kidney shape.

Inference:

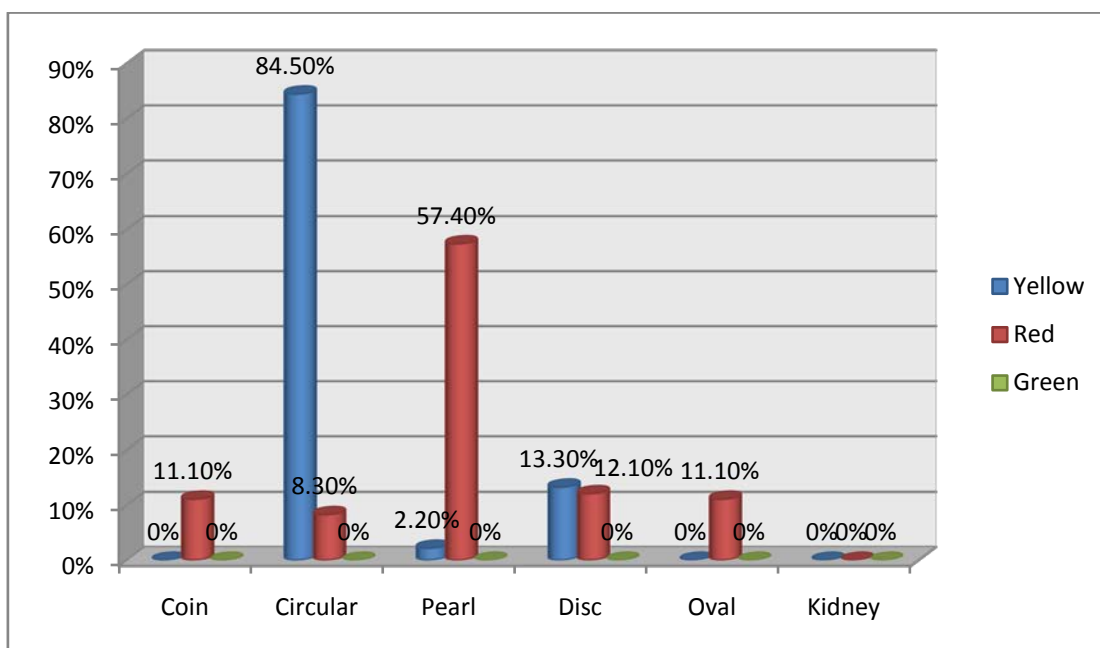
In most of the cases with green zone of BA, neikuri observed was Coin shape.

In most of the cases with yellow zone of BA, neikuri observed was Circular shape.

In most of the cases with red zone of BA, neikuri observed was Pearl shape.

7.A.22. NEIKKURI IN MALE CASES:

Neikuri	Zones of Bronchial asthma		
	Green	Yellow	Red
Coin	0%	0%	11.1%
Circular	0%	84.5%	8.3%
Pearl	0%	2.2%	57.4%
Disc	0%	13.3%	12.1%
Oval	0%	0%	11.1
Kidney	0%	0%	0%
Total	0%	100%	100%



Observation:

The following are the neikuri pattern results observed among 17 male cases.

No case was found with green zone of BA.

In cases with yellow zone of BA, 84.5% showed Circular shape, 2.2% showed Pearl and 13.3% of cases showed disc shape.

In cases with red zone of BA, 57.4% showed Pearl shape, 12.1% showed Disc shape and 11.1% of cases showed coin shape, 11.1% showed oval shape and 8.3% showed circular shape.

Inference:

In most of the cases with yellow zone of BA, neikuri observed was Circular shape.

In most of the cases with red zone of BA, neikuri observed was Pearl shape.

OBSERVATION AND RESULTS - HEALTHY VOLUNTEERS...

neerukkuri neikkuri

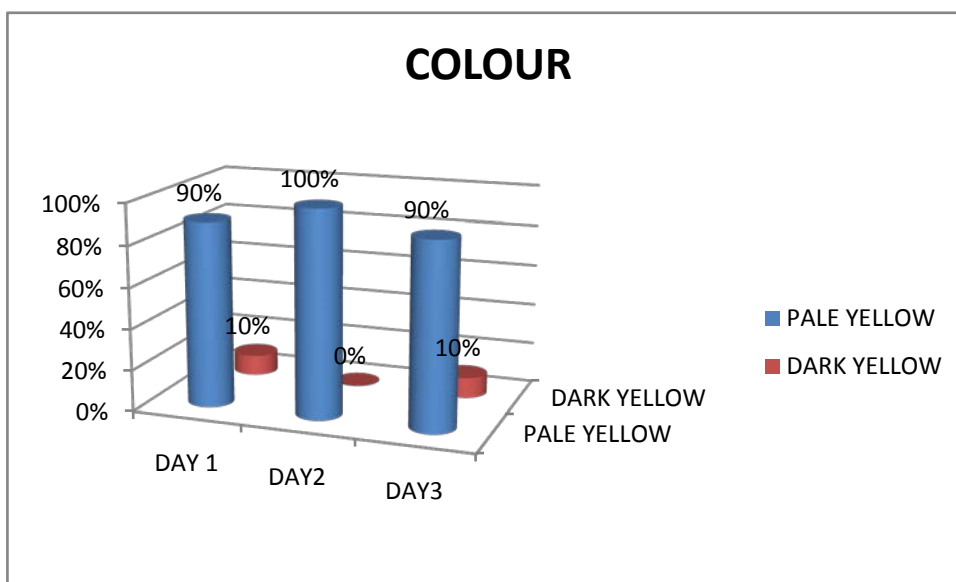
- Manthara Kaasam



7.B.HEALTHY VOLUNTEERS

7.B.1.COLOUR OF URINE:

COLOUR	DAY 1		DAY 2		DAY 3	
	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE
PALE YELLOW	9	90%	10	100%	9	90%
DARK YELLOW	1	10%	0	0%	1	10%
TOTAL	10	100%	10	100%	10	100%



Observation:

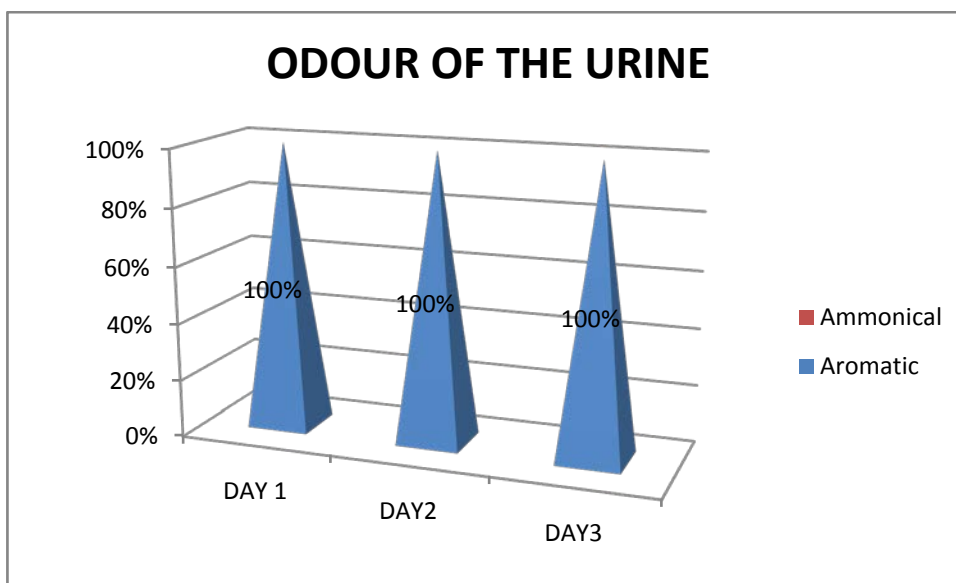
Among 10 cases, the colour of the urine had 90% pale yellow colour , 10% of cases had dark yellow colour in first day and third day. 100% of cases had pale yellow colour.

Inference:

In most of the cases, the colour of the urine observed were pale yellow colour.

7.B.2.ODOUR OF URINE:

ODOUR	DAY 1		DAY 2		DAY 3	
	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE
Aromatic	10	100%	10	100%	10	100%
Ammonical	0	0%	0	0%	0	0%
Total	10	100%	10	100%	10	100%



Observation:

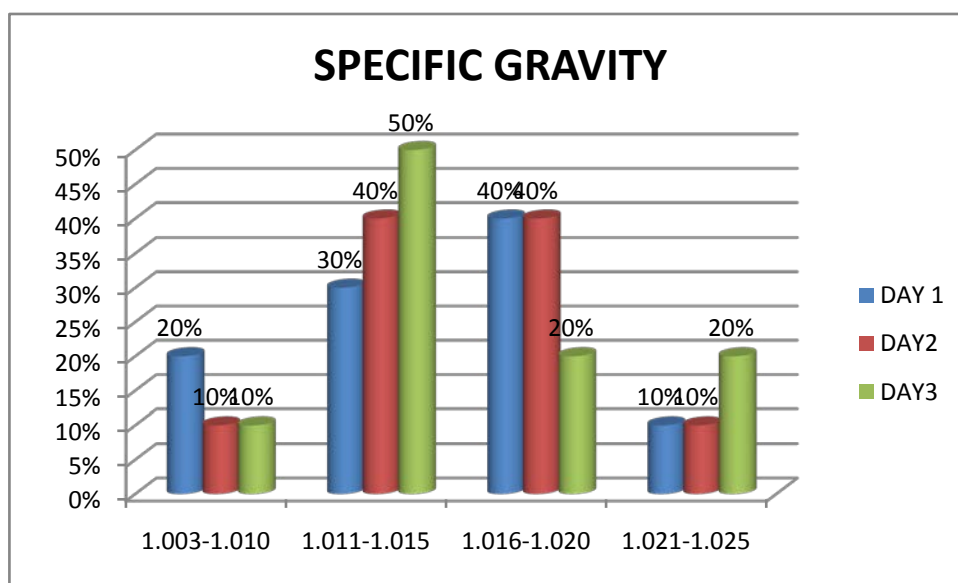
Among 10 cases, the odour of the urine 100% had aromatic odour in three days.

Inference:

In all of the cases, the odour of the urine observed were of aromatic odour. The odour obtained were normal.

7.B.3.SPECIFIC GRAVITY:

SPECIFIC GRAVITY	DAY 1		DAY 2		DAY 3	
	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE
1.003-1.010	2	20%	1	10%	1	10%
1.011-1.015	3	30%	4	40%	5	50%
1.016-1.020	4	40%	4	40%	2	20%
1.021-1.025	1	10%	1	10%	2	20%
TOTAL	10	100%	10	100%	10	100%



Observation:

Among 10 cases, the Specific gravity of the urine in the first day , 20% had Specific gravity between 1.003-1.010, 30% had Specific gravity between 1.011-1.015, 40% had Specific gravity between 1.015-1.020 and 10% had Specific gravity between 1.021-1.025

Among 10 cases, the Specific gravity of the urine in the first day , 10% had Specific gravity between 1.003-1.010, 40% had Specific gravity between 1.011-1.015, 40% had Specific gravity between 1.015-1.020 and 10% had Specific gravity between 1.021-1.025.

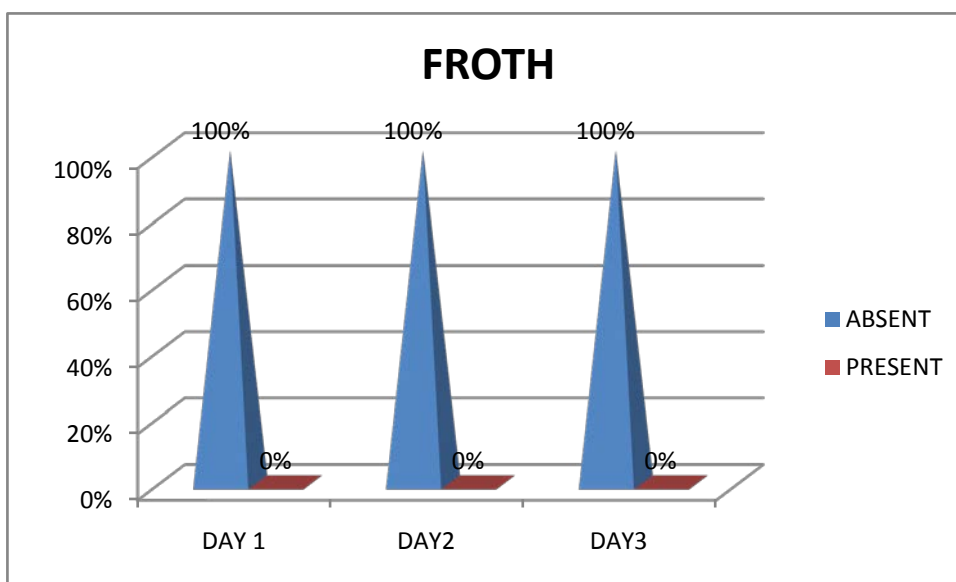
Among 10 cases, the Specific gravity of the urine in the first day , 10% had Specific gravity between 1.003-1.010, 50% had Specific gravity between 1.011-1.015, 20% had Specific gravity between 1.015-1.020 and 20% had Specific gravity between 1.021-1.025.

Inference:

In most of the cases, the Specific gravity of the urine observed were of 1.010– 1.020. The result obtained were normal

7.B.4.FROTH:

FROTH	DAY 1		DAY 2		DAY 3	
	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE
ABSENT	10	100%	10	100%	10	100%
PRESENT	0	0%	0	0%	0	0%
TOTAL	10	100%	10	100%	10	100%

**Observation:**

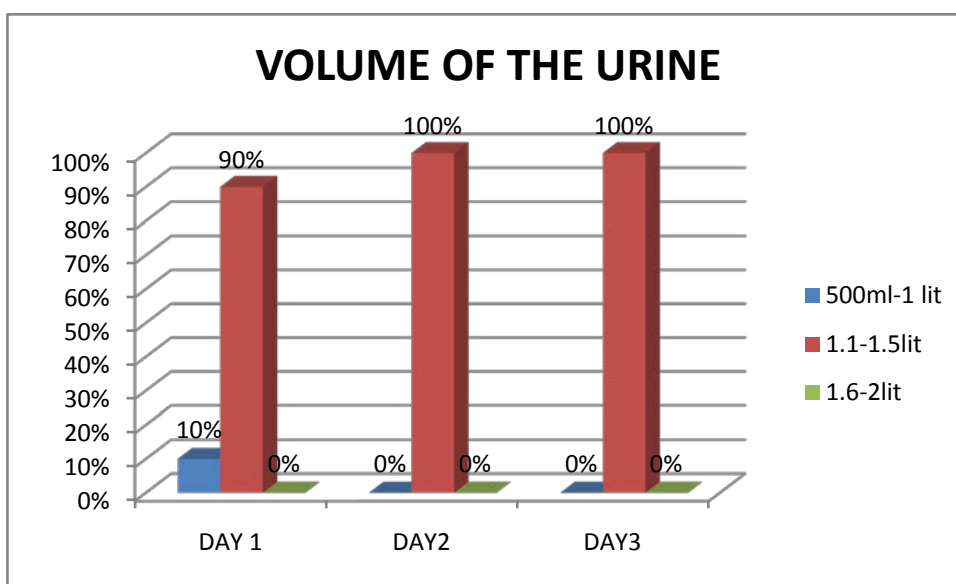
Among 10 cases the froth of the urine is absent in 100% in three days.

Inference:

In most of the cases, the froth is absent in the urine. The result which is Obtained were normal.

7.B.5.VOLUME OF URINE:

VOLUME OF URINE	DAY 1		DAY 2		DAY 3	
	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE
500ml-1 lit	1	10%	0	0%	0	0%
1.1-1.5lit	9	90%	10	100%	10	100%
1.6-2lit	0	0%	0	0%	0	0%
TOTAL	10	100%	10	100%	10	100%



Observation:

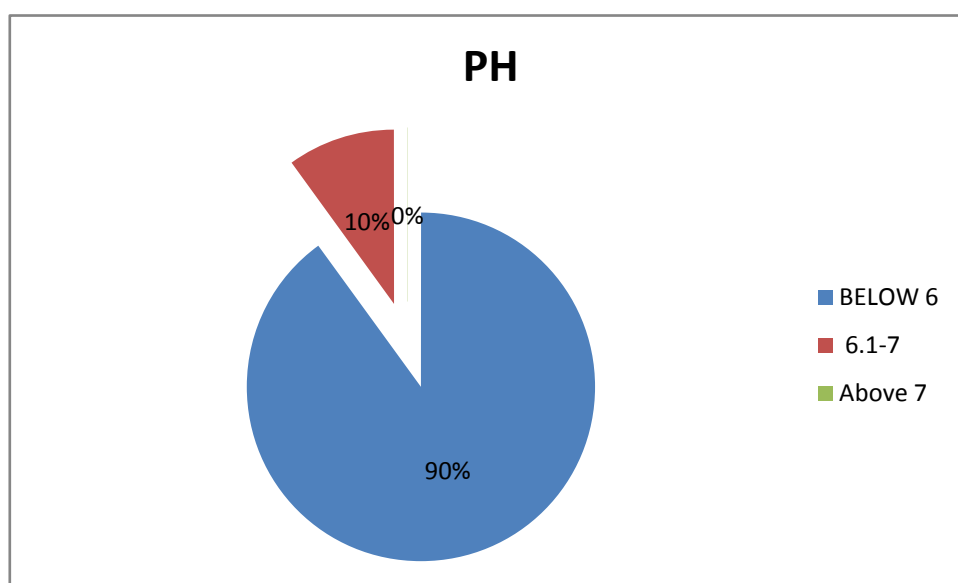
Among 10 cases 90% of cases passed 1.1-1.5 lit per day , 10% of cases passed 500ml-1 lit in first day.100% of cases passed 1.1-1.5 lit in the second and third day .

Inference:

In all of the cases, the volumes of the urine passed per day were 1.1-1.5litres.

7.B.6.PH VALUE:

PH	NO OF CASES	PERCENTAGE
BELOW 6	9	90%
6.1-7	1	10%
Above 7	0	0%
TOTAL	10	100%



Observation:

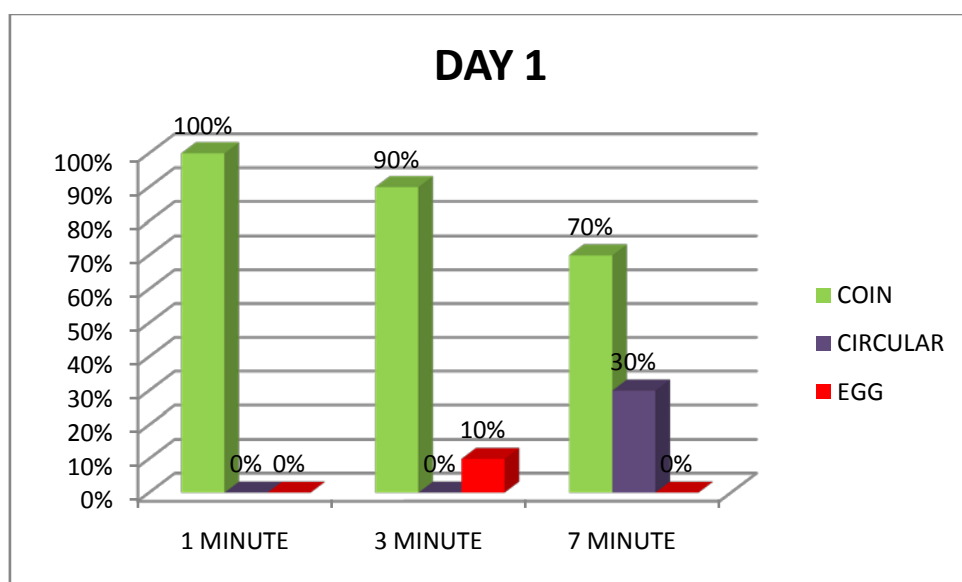
Among 10 cases , 90% of cases had PH below 6, 10% of cases had pH between 6.1-7.

Inference:

In most of the cases, the PH of the urine observed were of below 6. The result which obtained were normal.

7.B.7.DIFFERENT PATTERNS OBSERVED IN NEIKKURI: DAY 1

DAY 1	1 MINUTE		3 MINUTE		7 MINUTE	
	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE
COIN	10	100%	9	90%	7	70%
CIRCULAR	0	0%	0	0%	3	30%
EGG	0	0%	1	10%	0	0%
TOTAL	10	100%	10	100%	10	100%



Observation:

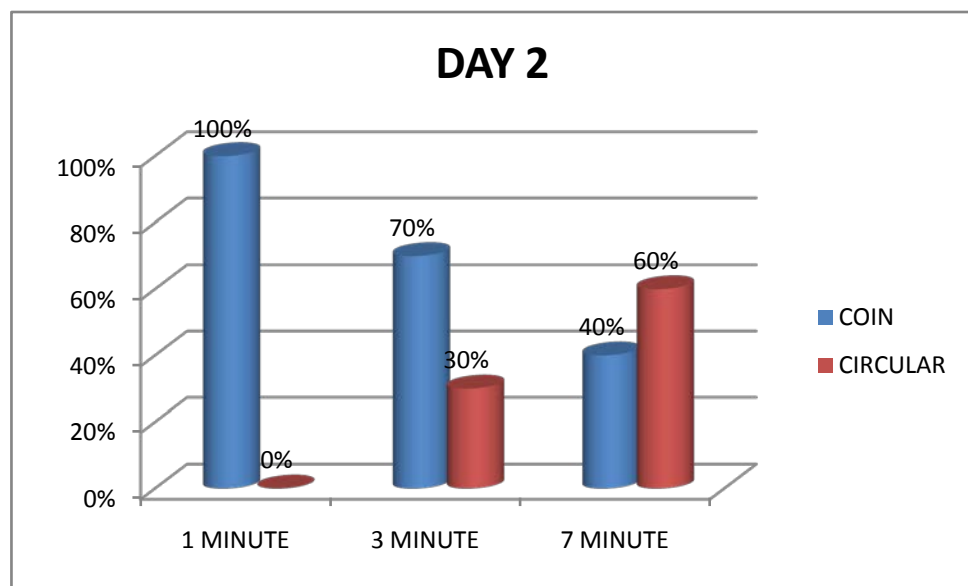
Among 10 cases, the shape of the Neikkuri in first minute, 100% of cases had coin shape. In three minutes, 90% of cases had coin shape, 10% of cases had egg shape. In seven minutes, 70% of cases had coin shape, 30% of cases had circular shape

Inference:

In most of the cases, the shape of the Neikkuri observed in first minute, three minutes and seven minutes were of coin and circular shapes.

7.B.8.DIFFERENT PATTERNS OBSERVED IN NEIKKURI: DAY 2

DAY 2	1 MINUTE		3 MINUTE		7 MINUTE	
	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE
COIN	10	100%	7	70%	4	40%
CIRCULAR	0	0%	3	30%	6	60%
TOTAL	10	100%	10	100%	10	100%



Observation:

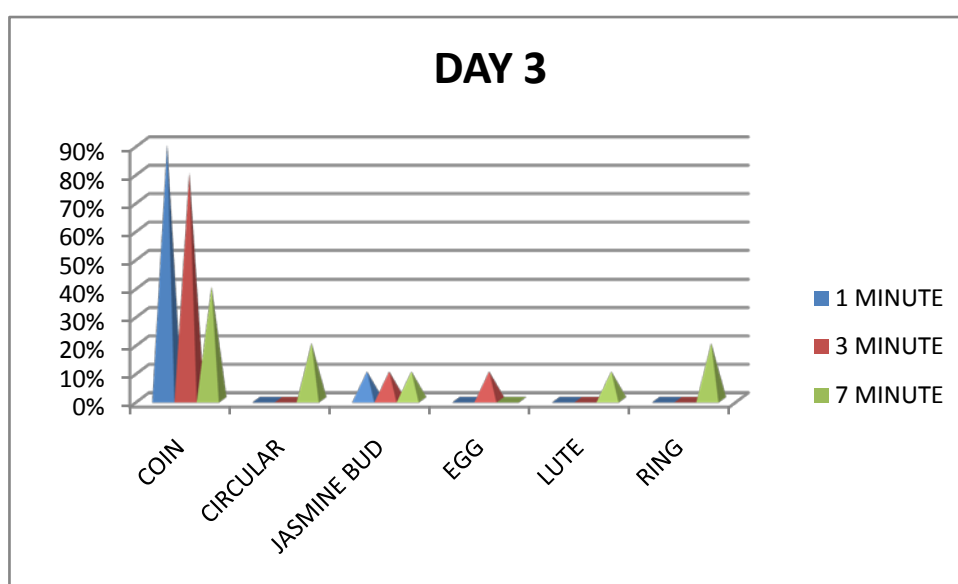
Among 10 cases, the shape of the Neikkuri in first minute, 100% of cases had coin shape. In three minutes, 70% of cases had coin shape, 30% of cases had circular shape. In seven minutes, 40% of cases had coin shape, 60% of cases had circular shape.

Inference:

In most of the cases, the shape of the Neikkuri observed in first minute, three minutes and seven minutes were of coin and circular shapes.

7.B.9.DIFFERENT PATTERNS OBSERVED IN NEIKKURI: DAY 3

DAY 3	1 MINUTE		3 MINUTE		7 MINUTE	
	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE	NO OF CASES	PERCENTAGE
COIN	9	90%	8	80%	4	40%
CIRCULAR	0	0%	0	0%	2	20%
JASMINE BUD	1	10%	1	10%	1	10%
EGG	0	0%	1	10%	0	0%
LUTE	0	0%	0	0%	1	10%
RING	0	0%	0	0%	2	20%
TOTAL	10	100%	10	100%	10	100%



Observation:

Among 10 cases, the shape of the Neikkuri in first minute, 90% of cases had coin shape and 10% of cases had jasmine bud shape. In three minutes, 80% of cases had coin shape, 10% of cases had jasmine bud and egg shape. In seven minutes, 40% of cases had coin shape, 20% of cases had circular, ring shape, 10% of cases had jasmine bud, lute shape.

Inference:

In most of the cases, the shape of the Neikkuri observed in first minute, three minutes and seven minutes were of coin and circular shapes.

TABLE SHOWS MANTHAARA KAASAM PATIENTS -LAB INVESTIGATIONS

S.NO	IP NO	AGE /SEX	HB	TRBC	TC	DC			PLT	ESR		SPECIAL INVESTIGATION		MOTION		
						N	L	E		30	1	AEC	SPUTUM AFB	OVA	CYST	OCCULT BLOOD
1	4036	35/F	11.4	4.1	7100	68	30	3	3.3	2	6	1163	NEGATIVE	NIL	NIL	ABSENT
2	4038	42/F	13.7	4.5	9,400	62	35	3	2.3	6	14	88	NEGATIVE	NIL	NIL	ABSENT
3	4040	45/F	14.1	4.8	9,600	40	43	17	2.5	2	6	1311	NEGATIVE	NIL	NIL	ABSENT
4	5026	60/M	15.8	4.1	4,600	61	36	3	3.5	4	8	155	NEGATIVE	NIL	NIL	ABSENT
5	5027	56/M	14.1	4	9800	67	30	3	5.7	38	126	445	NEGATIVE	NIL	NIL	ABSENT
6	4014	51/M	19.7	6.5	8,800	50	41	9	2.2	2	4	977	NEGATIVE	NIL	NIL	ABSENT
7	C80999	22/F	9.4	4.7	5900	60	36	3	2.5	32	68	540	NEGATIVE	NIL	NIL	ABSENT
8	C89774	19/M	14.5	3.6	9,300	73	22	5	3.6	42	94	370	NEGATIVE	NIL	NIL	ABSENT
9	C69926	25/M	18.4	5.9	6,500	60	34	6	2	4	8	156	NEGATIVE	NIL	NIL	ABSENT
10	C88048	32/M	17.2	5.7	7,200	56	37	1	2.4	2	4	360	NEGATIVE	NIL	NIL	ABSENT
11	C88049	25/M	12.5	4	8,100	42	40	2	3.8	2	4	415	NEGATIVE	NIL	NIL	ABSENT
12	C66018	23/M	16.1	5	5,500	41	44	15	2.7	2	4	455	NEGATIVE	NIL	NIL	ABSENT
13	C60988	33/F	12.3	4.4	4,600	50	43	7	2.3	4	8	244	NEGATIVE	NIL	NIL	ABSENT
14	C89036	38/M	15	4.9	6,100	60	33	7	2.6	2	4	233	NEGATIVE	NIL	NIL	ABSENT
15	5039	49/M	16.7	5.2	8600	58	39	5	2.7	2	4	390	NEGATIVE	NIL	NIL	ABSENT
16	C89980	46/F	12.4	4.2	6,900	60	36	4	2.9	2	6	216	NEGATIVE	NIL	NIL	ABSENT
17	C94039	50/F	10.7	4.4	5500	40	49	11	2.8	2	4	560	NEGATIVE	NIL	NIL	ABSENT
18	C94552	37/F	13	4.4	12,000	78	20	2	2.4	4	8	200	NEGATIVE	NIL	NIL	ABSENT
19	C92028	20/F	12.8	4.6	6,500	60	37	3	2.9	4	8	388	NEGATIVE	NIL	NIL	ABSENT
20	C92211	44/F	12.6	4.5	10,200	54	38	8	3.7	4	52	345	NEGATIVE	NIL	NIL	ABSENT

TABLE SHOWS MANTHAARA KAASAM PATIENTS -LAB INVESTIGATIONS

S.NO	IP NO	AGE/ SEX	HB	TRBC	TC	DC			PLT	ESR		SEROLOGY		MOTION		
						N	L	E		30	1	AEC	SPUTUM AFB	OVA	CYST	OCCULT BLOOD
21	B60353	50/M	13.5	5.1	8600	57	31	5	3.3	2	12	678	NEGATIVE	NIL	NIL	ABSENT
22	C64209	30/F	12.6	3.9	8,100	68	28	4	1.9	2	6	119	NEGATIVE	NIL	NIL	ABSENT
23	4121	32/F	10.3	4.4	4,600	60	33	7	3.2	10	26	654	NEGATIVE	NIL	NIL	ABSENT
24	C79542	25/F	12.2	4.6	9,800	58	30	12	2.8	10	40	777	NEGATIVE	NIL	NIL	ABSENT
25	C97203	27/M	9.9	3.6	9800	83	16	1	2.3	40	126	410	NEGATIVE	NIL	NIL	ABSENT
26	C82509	32/F	14.4	3.9	8,000	43	49	8	2.2	2	4	611	NEGATIVE	NIL	NIL	ABSENT
27	C97496	45/F	11.9	4.3	6900	62	33	5	3	4	8	267	NEGATIVE	NIL	NIL	ABSENT
28	C75187	38/F	11.9	4.4	6800	70	25	5	2.6	20	48	560	NEGATIVE	NIL	NIL	ABSENT
29	C98741	48/M	16.3	5	5,400	60	32	8	1.9	4	20	589	NEGATIVE	NIL	NIL	ABSENT
30	C25474	25/F	13.7	4.4	8100	38	49	13	2.6	10	30	455	NEGATIVE	NIL	NIL	ABSENT
31	C81982	51/F	8.9	4.1	8,100	62	33	5	3.7	20	40	77	NEGATIVE	NIL	NIL	ABSENT
32	C97642	31/F	11.4	4.9	9,700	70	26	4	4.1	16	44	99	NEGATIVE	NIL	NIL	ABSENT
33	AL9663	48/F	13.3	4.7	7,800	75	20	5	2.7	20	44	168	NEGATIVE	NIL	NIL	ABSENT
34	C99206	19/F	16.3	5.7	9,600	30	53	17	3.9	2	4	844	NEGATIVE	NIL	NIL	ABSENT
35	D2877	46/F	12.8	4.8	11,300	59	33	8	3.2	2	4	133	NEGATIVE	NIL	NIL	ABSENT
36	D2865	24/M	8.5	3.8	6500	65	27	7	2.7	30	60	768	NEGATIVE	NIL	NIL	ABSENT
37	C87859	45/F	11.5	4.1	7100	60	35	5	3.1	4	12	255	NEGATIVE	NIL	NIL	ABSENT
38	D5464	31/M	15.4	5.6	7,800	59	36	5	3	2	4	144	NEGATIVE	NIL	NIL	ABSENT
39	B80815	18/M	14.7	5.3	9,400	70	26	4	2.7	2	4	66	NEGATIVE	NIL	NIL	ABSENT
40	B37315	22/M	8.7	4	8000	70	26	4	2.5	56	120	580	NEGATIVE	NIL	NIL	ABSENT

TABLE SHOWS MANTHAARA KAASAM PATIENTS - LAB INVESTIGATIONS

S.NO	IP NO	AGE/ SEX	SUGAR		CHOLESTEROL					URIC ACID	UREA	CREATI NINE	SGO T	SGPT	ALP	PROTEIN		
			F	PP	TOTAL	HDL	LDL	VLDL	TGL							TOTAL	ALBUMIN	GLOBIN
1	4036	35/F	88	96	189	34	129	26	129	5.9	18	0.6	18	22	167	6.7	4.4	2.3
2	4038	42/F	98	160	208	40	120	41	207	3	21	0.6	33	24	180	7	5	2
3	4040	45/F	93	117	173	36	126	19	90	3.1	17	0.5	18	16	170	6	4	2
4	5026	60/M	97	116	95	23	70	26	130	6.7	20	0.6	55	37	189	5.7	3	2.7
5	5027	56/M	68	127	178	28	135	52	125	5.2	14	0.5	29	30	361	6.7	4	2.7
6	4014	51/M	100	117	172	36	133	34	170	7	15	0.4	17	19	140	7.5	5.5	2
7	C80999	22/F	76	104	112	30	62	26	131	5.5	15	0.6	14	15	213	6.2	3.7	2.5
8	C89774	19/M	100	132	161	30	90	42	212	6	20	0.6	18	19	201	6	4	2
9	C69926	25/M	92	103	118	22	119	16	32	7.1	15	0.5	37	32	196	6.6	4.4	2.6
10	C88048	32/M	92	101	131	25	133	23	116	7	14	0.4	26	27	156	6.6	4	2.6
11	C88049	25/M	94	105	108	27	109	10	53	4.9	22	0.6	24	25	14.5	6.6	4.4	2.2
12	C66018	23/M	98	106	90	22	50	15	77	6	14	0.5	13	14	152	7	4	3
13	C60988	33/F	96	136	156	40	119	14	70	4.3	15	0.4	30	31	172	7.6	5.2	2.4
14	C89036	38/M	97	108	154	24	106	16	83	4.5	25	0.7	39	15	226	7	5	2
15	5039	49/M	87	101	141	30	124	14	70	4.3	14	0.4	16	17	142	5.6	3.1	2.4
16	C89980	46/F	96	110	258	42	110	22	112	4.7	10	11	10	11	149	6.1	3.6	2.5
17	C94039	50/F	107	140	162	30	110	25	128	3.2	20	0.6	16	17	160	7.2	5.2	2
18	C94552	37/F	104	117	193	30	122	22	113	3.4	15	0.6	18	20	236	7.9	4.6	3.3
19	C92028	20/F	85	99	131	30	101	18	92	3.6	28	0.8	23	24	170	5.5	3.6	2.9
20	C92211	44/F	100	111	195	37	100	33	167	5.6	14	0.5	16	20	188	6.9	3.4	3.5

TABLE SHOWS MANTHAARA KAASAM PATIENTS -LAB INVESTIGATIONS

S.NO	IP NO	AGE/ SEX	SUGAR		CHOLESTEROL					URIC ACID	UREA	CREATINI NE	SG OT	SGPT	ALP	PROTEIN		
			F	PP	TOTAL L	HDL	LDL	VLDL	TGL							TOTAL	ALBUMI N	GLOBIN
21	B60353	50/M	115	164	179	38	102	19	95	7.5	14	0.4	41	20	198	7.1	5.1	2
22	C64209	30/F	91	112	150	33	86	19	98	6.2	21	0.6	13	14	166	7	5	2
23	4121	32/F	101	117	125	30	98	13	65	4.6	14	0.4	15	16	214	6	4	2
24	C79542	25/F	93	115	103	29	55	19	170	14	14	0.4	18	19	170	5.6	2.7	2.9
25	C97203	27/M	84	111	102	17	67	44	221	3	15	0.4	26	29	170	6.1	4.1	2
26	C82509	32/F	93	101	173	35	96	16	80	5	19	0.5	12	15	169	6.5	4.1	2.4
27	C97496	45/F	133	152	173	34	137	40	197	5	17	0.6	17	25	136	6.8	3.8	3
28	C75187	38/F	93	103	117	29	64	33	165	3	14	0.6	13	15	183	5.9	3.2	2.7
29	C98741	48/M	101	158	202	36	112	61	305	4.4	15	0.4	17	19	170	6.7	4.6	2.1
30	C25474	25/F	84	110	145	41	78	22	110	4	26	0.6	40	25	187	7.2	4.5	2.7
31	C81982	51/F	108	150	138	30	90	16	80	3.1	14	0.5	14	16	184	5.1	2.6	2.5
32	C97642	31/F	102	130	200	35	82	23	115	5.7	23	0.7	14	16	168	6.6	4.3	2.3
33	AL9663	48/F	89	106	153	32	82	16	80	7.4	21	0.7	24	26	189	6.6	4.4	2.2
34	C99206	19/F	92	101	163	32	66	32	164	3.2	14	0.4	11	13	166	5.9	3.3	2.6
35	D2877	46/F	100	128	177	32	70	25	129	4.1	16	0.5	13	15	184	7	4	3
36	D2865	24/M	82	132	135	25	92	18	110	3	17	0.5	17	18	125	6.5	3.5	3
37	C87859	45/F	141	156	168	35	86	15	76	3.7	14	0.4	14	16	183	6.6	4.5	2.1
38	D5464	31/M	121	126	200	38	92	23	118	5.1	18	0.5	18	20	191	6.1	4.1	2
39	B80815	18/M	108	120	195	30	96	21	104	5.7	18	0.6	25	27	194	6	4	2
40	B37315	22/M	85	103	154	35	99	20	115	4	26	0.7	15	25	172	7.2	5	2.2

TABLE SHOWS MANTHAARA KAASAM PATIENTS - LAB INVESTIGATIONS

S.NO	OP/IP NO	AGE/ SEX	PH	SPECIFIC GRAVITY	ALBUM IN	SUGAR	ACETON E	BILE SALT	BILE PIGMENT	UROBILI NOGEN	OCCULT BLOOD	DEPOSITS	
												PUS	EPI
1	3832	52/F	5.5	1.01	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	1-10	1-2
2	4879	41/M	6.8	1.01	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	2-3	1-2
3	3931	56/F	5.8	1.01	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	2-3	2-3
4	3924	45/F	5.5	1.014	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	1-2	2-3
5	3849	24/F	6.9	1.012	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	2-4	3-5
6	3871	57/F	5.8	1.012	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	2-4	2-4
7	3954	52/F	5.4	1.016	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	3-6	3-6
8	4001	47/F	5.6	1.02	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	3-4	2-3
9	3998	52/F	5.5	1.03	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	3-4	4-5
10	4980	40/M	5.6	1.012	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	2-3	2-3
11	4010	40/F	5.4	1.02	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	2-4	1-2
12	5018	23/M	5.5	1.03	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	2-3	2-3
13	4031	50/F	6.7	1.02	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	2-6	1-3
14	4032	60/F	5.6	1.02	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	1-2	3-4
15	5019	42/M	6.5	1.014	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	2-4	2-4
16	4084	42/F	5.5	1.02	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	1-2	1-2
17	4057	56/F	5.3	1.012	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	1-2	1-2
18	4117	29/F	5.5	1.026	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	2-3	2-3
19	4090	49/F	6	1.006	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	3-6	4-8
20	4098	36/F	6.3	1.016	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	1-2	2-3

TABLE SHOWS MANTHAARA KAASAM PATIENTS -LAB INVESTIGATIONS

S.NO	OP/IP NO	AGE/SEX	PH	SPECIFIC GRAVITY	ALBUMIN	SUGAR	ACETONE	BILE SALT	BILE PIGMENT	UROBILINOGEN	OCCULT BLOOD	DEPOSITS	
												PUS	EPI
21	4081	39/F	5.6	1.016	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	2-4	2-4
22	4136	54/F	5.5	1.012	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	1-2	2-4
23	4111	39/F	6.3	1.012	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	1-2	2-4
24	4081	35/F	6.3	1.008	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	2-4	2-4
25	4080	33/F	6.9	1.008	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	4-5	4-5
26	4166	25/F	7.3	1.012	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	4-5	8-10
27	4173	46/F	6.5	1.012	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	1-2	1-2
28	4183	53/F	5.6	1.01	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	1-2	2-3
29	4098	40/F	6.2	1.014	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	3-4	PLENTY
30	4179	57/F	6.5	1.018	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	2-3	1-2
31	5118	47/M	6.6	1.01	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	2-4	2-4
32	4249	50/F	6.2	1.01	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	1-2	2-4
33	4253	37/F	5.7	1.008	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	8-10	8-10
34	4259	52/F	6.9	1.006	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	1-2	2-4
35	4302	42/F	5.8	1.008	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	2-4	2-4
36	4298	36/F	6.4	1.01	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	1-2	3-5
37	4289	50/F	6.2	1.012	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	4-5	5-10
38	5279	19/M	5.3	1.012	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	4-8	3-6
39	4359	42/F	6.2	1.016	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	4-5	4-6
40	4379	52/F	6.1	1.012	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	4-5	5-8

TABLE SHOWS ANALYSIS OF NEERKKURI IN MANTHAARA KAASAM PATIENTS - DAY 1

S.NO	OP/IP NO	AGE/ SEX	COLOUR(NIRAM)	SPECIFIC GRAVITY(AEDAI)	ODOUR(MANAM)	FROTH(N URAI)	ENJAL		
							VOLUME	DEPOSITS(PUS,EPI)	
1	3832	52/F	PALE YELLOW	1.01	AROMATIC	PRESENT	1.3L	1-10	1-2
2	4879	41/M	PALE YELLOW	1.01	AROMATIC	CLEAR	1.5L	2-3	1-2
3	3931	56/F	PALE YELLOW	1.01	AROMATIC	CLEAR	1.2L	2-3	2-3
4	3924	45/F	PALE YELLOW	1.014	AROMATIC	CLEAR	1.2L	1-2	2-3
5	3849	24/F	PALE YELLOW	1.012	AROMATIC	CLEAR	1.5L	2-4	3-5
6	3871	57/F	COLOURLESS	1.012	AROMATIC	CLEAR	1.4L	2-4	2-4
7	3954	52/F	PALE YELLOW	1.016	AMMONIAL	CLEAR	1.3L	3-6	3-6
8	4001	47/F	DARK YELLOW	1.02	AROMATIC	CLEAR	1.3L	3-4	2-3
9	3998	52/F	PALE YELLOW	1.03	AROMATIC	CLEAR	1.4L	3-4	4-5
10	4980	40/M	PALE YELLOW	1.012	AROMATIC	CLEAR	1.5L	2-3	2-3
11	4010	40/F	PALE YELLOW	1.02	AROMATIC	CLEAR	1.3L	2-4	1-2
12	5018	23/M	PALE YELLOW	1.03	AROMATIC	CLEAR	1.4L	2-3	2-3
13	4031	50/F	PALE YELLOW	1.02	AROMATIC	CLEAR	1.2L	2-6	1-3
14	4032	60/F	PALE YELLOW	1.02	AROMATIC	CLEAR	1.3L	1-2	3-4
15	5019	42/M	PALE YELLOW	1.014	AROMATIC	CLEAR	1.6L	2-4	2-4'
16	4084	42/F	PALE YELLOW	1.02	AROMATIC	CLEAR	1.1L	1-2	1-2
17	4057	56/F	CLOURLESS	1.012	AROMATIC	CLEAR	1.3L	1-2	1-2
18	4117	29/F	DARK YELLOW	1.026	AMMONIAL	CLEAR	1.6L	2-3	2-3
19	4090	49/F	PALE YELLOW	1.006	AROMATIC	CLEAR	1.2L	3-6	2-8
20	4098	36/F	DARK YELLOW	1.016	AROMATIC	CLEAR	1.4L	1-2	2-3

TABLE SHOWS ANALYSIS OF NEERKKURI IN MANTHAARA KAASAM PATIENTS - DAY 1

S.NO	OP/IP NO	AGE/SEX	COLOUR(NIRAM)	SPECIFIC GRAVITY(AEDAI)	ODOUR(MANAM)	FROTH(NURAI)	ENJAL		
							VOLUME	DEPOSITS(PUS,EPI CELL	
21	4081	39/F	DARK YELLOW	1.016	AROMATIC	CLEAR	1.4L	2-4	2-4
22	4136	54/F	COLOURLESS	1.012	AROMATIC	CLEAR	1.5L	1-2	2-4
23	4111	39/F	DARK YELLOW	1.012	AROMATIC	CLEAR	1.3L	1-2	2-4
24	4081	35/F	COLOURLESS	1.008	AROMATIC	CLEAR	1.4L	2-4	2-4
25	4080	33/F	PALE YELLOW	1.008	AROMATIC	CLEAR	1.2L	4-5	4-5
26	4166	25/F	PALE YELLOW	1.012	AROMATIC	CLEAR	1.4L	4-5	8-10
27	4173	46/F	PALE YELLOW	1.012	AROMATIC	CLEAR	1.4L	1-2	1-2
28	4183	53/F	PALE YELLOW	1.01	AROMATIC	CLEAR	1.2L	1-2	2-3
29	4098	40/F	PALE YELLOW	1.014	AROMATIC	CLEAR	1.3L	3-4	PLENTY
30	4179	57/F	DARK YELLOW	1.018	AROMATIC	CLEAR	1.4L	2-3	1-2
31	5118	47/M	PALE YELLOW	1.01	AROMATIC	CLEAR	1.2L	2-4	2-4
32	4249	50/F	PALE YELLOW	1.01	AROMATIC	CLEAR	1.4L	1--2	2-4
33	4253	37/F	PALE YELLOW	1.008	AROMATIC	CLEAR	1.4L	8-10	8-10
34	4259	52/F	PALE YELLOW	1.006	AROMATIC	CLEAR	1.3L	1-2	2-4
35	4302	42/F	PALE YELLOW	1.008	AROMATIC	CLEAR	1.5L	2-4	2-4
36	4298	36/F	PALE YELLOW	1.01	AROMATIC	CLEAR	1.2L	1-2	3-5
37	4289	50/F	PALE YELLOW	1.012	AROMATIC	CLEAR	1.3L	4-5	5-10
38	5279	19/M	DARK YELLOW	1.012	AROMATIC	CLEAR	1.4L	4-8	3-6
39	4359	42/F	PALE YELLOW	1.016	AROMATIC	CLEAR	1.3L	4-5	4-6
40	4379	52/F	PALE YELLOW	1.012	AROMATIC	CLEAR	1.4L	2-3	5-6

TABLE SHOWS ANALYSIS OF NEERKKURI IN MANTHAARA KAASAM PATIENTS - DAY 2

S.NO	OP/IP NO	AGE/SEX	COLOUR(NIRAM)	SPECIFIC GRAVITY(AEDAI)	ODOUR(MANAM)	FROTH(NURAI)	ENJAL
1	3832	52/F	PALE YELLOW	1.01	AROMATIC	PRESENT	1.4L
2	4879	41/M	PALE YELLOW	1.012	AROMATIC	CLEAR	1.3L
3	3931	56/F	PALE YELLOW	1.014	AROMATIC	CLEAR	1.3L
4	3924	45/F	PALE YELLOW	1.014	AROMATIC	CLEAR	1.2L
5	3849	24/F	PALE YELLOW	1.012	AROMATIC	CLOUDY	1.3L
6	3871	57/F	PALE YELLOW	1.012	AROMATIC	PRESENT	1.3L
7	3954	52/F	PALE YELLOW	1.02	AMMONIAL	CLEAR	1.3L
8	4001	47/F	PALE YELLOW	1.016	AROMATIC	CLEAR	1.4L
9	3998	52/F	PALE YELLOW	1.024	AROMATIC	CLEAR	1.4L
10	4980	40/M	PALE YELLOW	1.012	AROMATIC	CLEAR	1.5L
11	4010	40/F	DARK YELLOW	1.03	AROMATIC	CLEAR	1.3L
12	5018	23/M	DARK YELLOW	1.024	AROMATIC	CLEAR	1.4L
13	4031	50/F	PALE YELLOW	1.012	AROMATIC	CLEAR	1.3L
14	4032	60/F	PALE YELLOW	1.012	AROMATIC	CLEAR	1.4L
15	5019	42/M	DARK YELLOW	1.02	AROMATIC	PRESENT	1.3L
16	4084	42/F	PALE YELLOW	1.02	AROMATIC	CLEAR	1.2L
17	4057	56/F	COLOURLESS	1.008	AROMATIC	CLEAR	1.3L
18	4117	29/F	DARK YELLOW	1.018	AROMATIC	CLEAR	1.3L
19	4090	49/F	PALE YELLOW	1.01	AROMATIC	CLEAR	1.4L
20	4098	36/F	DARK YELLOW	1.01	AROMATIC	CLEAR	1.3L

TABLE SHOWS ANALYSIS OF NEERKKURI IN MANTHAARA KAASAM PATIENTS - DAY 2

S.NO	OP/IP NO	AGE/SEX	COLOUR(NIRAM)	SPECIFIC GRAVITY(AEDAI)	ODOUR(MANAM)	FROTH(NURAI)	ENJAL
21	4081	39/F	DARK YELLOW	1.014	AROMATIC	CLEAR	1.5L
22	4136	54/F	COLOURLESS	1.014	AROMATIC	CLEAR	1.4L
23	4111	39/F	DARK YELLOW	1.022	AROMATIC	CLEAR	1.3L
24	4081	35/F	COLOURLESS	1.01	AROMATIC	CLEAR	1.4L
25	4080	33/F	PALE YELLOW	1.01	AROMATIC	CLEAR	1.5L
26	4166	25/F	PALE YELLOW	1.014	AROMATIC	CLEAR	1.6L
27	4173	46/F	PALE YELLOW	1.012	AROMATIC	CLEAR	1.2L
28	4183	53/F	PALE YELLOW	1.012	AROMATIC	CLEAR	1.3L
29	4098	40/F	PALE YELLOW	1.012	AROMATIC	CLEAR	1.5L
30	4179	57/F	PALE YELLOW	1.01	AROMATIC	CLEAR	1.2L
31	5118	47/M	PALE YELLOW	1.01	AROMATIC	CLEAR	1.3L
32	4249	50/F	PALE YELLOW	1.012	AROMATIC	CLEAR	1.3L
33	4253	37/F	PALE YELLOW	1.01	AROMATIC	CLEAR	1.4L
34	4259	52/F	PALE YELLOW	1.01	AROMATIC	CLEAR	1.5L
35	4302	42/F	PALE YELLOW	1.01	AROMATIC	CLEAR	1.4L
36	4298	36/F	PALE YELLOW	1.012	AROMATIC	CLEAR	1.2L
37	4289	50/F	PALE YELLOW	1.014	AROMATIC	CLEAR	1.3L
38	5279	19/M	DARK YELLOW	1.014	AROMATIC	CLEAR	1.5L
39	4359	42/F	PALE YELLOW	1.012	AROMATIC	CLEAR	1.5L
40	4379	52/F	PALE YELLOW	1.01	AROMATIC	CLEAR	1.4L

TABLE SHOWS ANALYSIS OF NEERKKURI IN MANTHAARA KAASAM PATIENTS - DAY 3

S.NO	OP/IP NO	AGE/SEX	COLOUR(NIRAM)	SPECIFIC GRAVITY(AEDAI)	ODOUR(MANAM)	FROTH(NURAI)	ENJAL
1	3832	52/F	PALE YELLOW	1.01	AROMATIC	CLEAR	1.5L
2	4879	41/M	PALE YELLOW	1.01	AROMATIC	CLEAR	1.4L
3	3931	56/F	PALE YELLOW	1.012	AROMATIC	CLEAR	1.3L
4	3924	45/F	PALE YELLOW	1.012	AROMATIC	CLEAR	1.3L
5	3849	24/F	PALE YELLOW	1.012	AMMONIAL	CLOUDY	1.6L
6	3871	57/F	PALE YELLOW	1.01	AROMATIC	CLEAR	1.4L
7	3954	52/F	PALE YELLOW	1.014	AROMATIC	CLEAR	1.3L
8	4001	47/F	PALE YELLOW	1.014	AROMATIC	CLEAR	1.2L
9	3998	52/F	PALE YELLOW	1.022	AROMATIC	CLEAR	1.6L
10	4980	40/M	PALE YELLOW	1.01	AROMATIC	CLEAR	1.4L
11	4010	40/F	DARK YELLOW	1.02	AROMATIC	CLEAR	1.3L
12	5018	23/M	PALE YELLOW	1.008	AROMATIC	CLEAR	1.4L
13	4031	50/F	PALE YELLOW	1.014	AROMATIC	CLEAR	1.6L
14	4032	60/F	PALE YELLOW	1.012	AROMATIC	CLEAR	1.5L
15	5019	42/M	PALE YELLOW	1.014	AROMATIC	CLEAR	1.4L
16	4084	42/F	PALE YELLOW	1.016	AROMATIC	CLEAR	1.3L
17	4057	56/F	COLOURLESS	1.01	AROMATIC	CLEAR	1.3L
18	4117	29/F	DARK YELLOW	1.016	AROMATIC	CLEAR	1.2L
19	4090	49/F	COLOURLESS	1.006	AROMATIC	CLEAR	1.3L
20	4098	36/F	DARK YELLOW	1.01	AROMATIC	CLEAR	1.3L

TABLE SHOWS ANALYSIS OF NEERKKURI IN MANTHAARA KAASAM PATIENTS - DAY 3

S.NO	OP/IP NO	AGE/SEX	COLOUR(NIRAM)	SPECIFIC GRAVITY(AEDAI)	ODOUR(MANAM)	FROTH(NURAI)	ENJAL
21	4081	39/F	DARK YELLOW	1.012	AROMATIC	CLEAR	1L
22	4136	54/F	PALE YELLOW	1.014	AROMATIC	CLEAR	1.4L
23	4111	39/F	DARK YELLOW	1.012	AROMATIC	CLEAR	1.2L
24	4081	35/F	COLOURLESS	1.008	AROMATIC	CLEAR	1.4L
25	4080	33/F	PALE YELLOW	1.01	AROMATIC	CLEAR	1.3L
26	4166	25/F	PALE YELLOW	1.014	AROMATIC	CLEAR	1L
27	4173	46/F	PALE YELLOW	1.014	AROMATIC	CLEAR	1.3L
28	4183	53/F	COLOURLESS	1.008	AROMATIC	CLEAR	1.4L
29	4098	40/F	DARK YELLOW	1.02	AROMATIC	CLEAR	1.4L
30	4179	57/F	PALE YELLOW	1.018	AROMATIC	CLEAR	1.3L
31	5118	47/M	PALE YELLOW	1.01	AROMATIC	CLEAR	1.4L
32	4249	50/F	PALE YELLOW	1.01	AROMATIC	CLEAR	1.5L
33	4253	37/F	PALE YELLOW	1.01	AROMATIC	CLEAR	1.2L
34	4259	52/F	PALE YELLOW	1.01	AROMATIC	CLEAR	1.4L
35	4302	42/F	PALE YELLOW	1.008	AROMATIC	CLEAR	1.3L
36	4298	36/F	PALE YELLOW	1.014	AROMATIC	CLEAR	1.3L
37	4289	50/F	PALE YELLOW	1.012	AROMATIC	CLEAR	1.5L
38	5279	19/M	DARK YELLOW	1.012	AROMATIC	CLEAR	1.4L
39	4359	42/F	PALE YELLOW	1.014	AROMATIC	CLEAR	1.3L
40	4379	52/F	PALE YELLOW	1.01	AROMATIC	CLEAR	1.4L

TABLE SHOWS ANALYSIS OF NEIKKURI IN MANTHAARA KAASAM PATIENTS - DAY 1						
S.NO	OP/IP NO	AGE/SEX	FIRST MINUTE	THIRD MINUTE	SEVENTH MINUTE	SPEARDING
1	3832	52/F	COIN	COIN	COIN	SLOW
2	4879	41/M	COIN	DISC	CIRCULAR	SLOW
3	3931	56/F	COIN	DISC	RECTANGLE	SLOW
4	3924	45/F	COIN	COIN	COIN	SLOW
5	3849	24/F	COIN	COIN	COIN	SLOW
6	3871	57/F	DISC	DISC	DISC	SLOW
7	3954	52/F	COIN	CIRCULAR	CIRCULAR	FAST
8	4001	47/F	COIN	COIN	DISC	FAST
9	3998	52/F	COIN	COIN	COIN	SLOW
10	4980	40/M	PEARL	COIN	COIN	SLOW
11	4010	40/F	PEARL	PEARL	PEARL	SLOW
12	5018	23/M	PEARL	COIN	COIN	SLOW
13	4031	50/F	COIN	COIN	COIN	SLOW
14	4032	60/F	PEARL	COIN	COIN	SLOW
15	5019	42/M	COIN	MITER	PEAR	FAST
16	4084	42/F	COIN	COIN	COIN	SLOW
17	4057	56/F	PEARL	COIN	COIN	SLOW
18	4117	29/F	PEARL	PEARL	COIN	SLOW
19	4090	49/F	COIN	COIN	COIN	SLOW
20	4098	36/F	PEARL	COIN	COIN	SLOW

TABLE SHOWS ANALYSIS OF NEIKKURI IN MANTHAARA KAASAM PATIENTS FIRST DAY

S.NO	OP/IP NO	AGE/SEX	FIRST MINUTE	THIRD MINUTE	SEVENTH MINUTE	SPEARDING
21	4081	39/F	COIN	COIN	DISC	SLOW
22	4136	54/F	COIN	COIN	COIN	SLOW
23	4111	39/F	PEARL	COIN	COIN	SLOW
24	4081	35/F	PEARL	COIN	COIN	SLOW
25	4080	33/F	COIN	COIN	COIN	SLOW
26	4166	25/F	PEARL	PEARL	COIN	SLOW
27	4173	46/F	COIN	COIN	COIN	SLOW
28	4183	53/F	PEARL	COIN	COIN	SLOW
29	4098	40/F	COIN	COIN	COIN	SLOW
30	4179	57/F	DISC	SIEVE	SIEVE	FAST
31	5118	47/F	COIN	COIN	COIN	SLOW
32	4249	50/F	COIN	COIN	DISC	SLOW
33	4253	37/F	COIN	COIN	DISC	SLOW
34	4259	52/F	COIN	COIN	COIN	SLOW
35	4302	42/F	COIN	DISC	RECTANGLE	SLOW
36	4298	36/F	COIN	COIN	COIN	SLOW
37	4289	50/F	COIN	COIN	COIN	SLOW
38	5279	19/M	PEARL	COIN	COIN	SLOW
39	4359	42/F	COIN	MITER	BUTTERFLY	FAST
40	4379	52/F	COIN	COIN	CIRCULAR	SLOW

TABLE SHOWS ANALYSIS OF NEIKKURI IN MANTHAARA KAASAM PATIENTS - DAY 2

S.NO	OP/IP NO	AGE/SEX	FIRST MINUTE	THIRD MINUTE	SEVENTH MINUTE	SPEARDING
1	3832	52/F	COIN	COIN	COIN	SLOW
2	4879	41/M	DISC	DISC	MOUNTAIN	FAST
3	3931	56/F	COIN	RECTANGLE	RECTANGLE	SLOW
4	3924	45/F	SHELL	LEAF	LEAF	FAST
5	3849	24/F	COIN	COIN	DISC	SLOW
6	3871	57/F	COIN	COIN	DISC	SLOW
7	3954	52/F	EGG	SHELL	SIEVE	FAST
8	4001	47/F	COIN	COIN	EGG	SLOW
9	3998	52/F	COIN	COIN	COIN	SLOW
10	4980	40/M	PEARL	COIN	EGG	SLOW
11	4010	40/F	PEARL	PEARL	PEARL	SLOW
12	5018	23/M	COIN	COIN	SEED	SLOW
13	4031	50/F	PEARL	PEARL	PEARL	SLOW
14	4032	60/F	PEARL	COIN	COIN	SLOW
15	5019	42/M	HEART	CONCH	CONCH	FAST
16	4084	42/F	PEARL	COIN	COIN	SLOW
17	4057	56/F	COIN	COIN	COIN	SLOW
18	4117	29/F	COIN	COIN	COIN	SLOW
19	4090	49/F	COIN	COIN	COIN	SLOW
20	4098	36/F	COIN	COIN	COIN	SLOW

TABLE SHOWS ANALYSIS OF NEIKKURI IN MANTHAARA KAASAM PATIENTS - DAY 2

S.NO	OP/IP NO	AGE/SEX	FIRST MINUTE	THIRD MINUTE	SEVENTH MINUTE	SPEARDING
21	4081	39/F	COIN	COIN	COIN	SLOW
22	4136	54/F	COIN	COIN	COIN	SLOW
23	4111	39/F	COIN	COIN	EGG	SLOW
24	4081	35/F	PEARL	COIN	COIN	SLOW
25	4080	33/F	PEARL	COIN	COIN	SLOW
26	4166	25/F	PEARL	PEARL	COIN	SLOW
27	4173	46/F	PEARL	COIN	DISC	SLOW
28	4183	53/F	PEARL	COIN	DISC	SLOW
29	4098	40/F	PEARL	COIN	COIN	SLOW
30	4179	57/F	COIN	COIN	COIN	SLOW
31	5118	47/F	COIN	COIN	COIN	SLOW
32	4249	50/F	COIN	COIN	COIN	SLOW
33	4253	37/F	PEARL	COIN	COIN	SLOW
34	4259	52/F	COIN	COIN	COIN	SLOW
35	4302	42/F	COIN	COIN	EGG	SLOW
36	4298	36/F	COIN	COIN	COIN	SLOW
37	4289	50/F	PEARL	COIN	COIN	SLOW
38	5279	19/M	COIN	COIN	COIN	SLOW
39	4359	42/F	COIN	COIN	RECTANGLE	FAST
40	4379	52/F	PEARL	COIN	COIN	SLOW

TABLE SHOWS ANALYSIS OF NEIKKURI IN MANTHAARA KAASAM PATIENTS - DAY 3

S.NO	OP/IP NO	AGE/SEX	FIRST MINUTE	THIRD MINUTE	SEVENTH MINUTE	SPEARDING
1	3832	52/F	COIN	COIN	COIN	SLOW
2	4879	41/M	DISC	CIRCULAR	CIRCULAR	FAST
3	3931	56/F	COIN	DISC	CIRCULAR	SLOW
4	3924	45/F	COIN	COIN	COIN	SLOW
5	3849	24/F	COIN	COIN	COIN	SLOW
6	3871	57/F	CIRCULAR	CIRCULAR	CIRCULAR	FAST
7	3954	52/F	COIN	COIN	EGG	SLOW
8	4001	47/F	COIN	COIN	COIN	SLOW
9	3998	52/F	PEARL	COIN	COIN	SLOW
10	4980	40/M	COIN	COIN	EMBRYO	SLOW
11	4010	40/F	PEARL	PEARL	PEARL	SLOW
12	5018	23/M	COIN	COIN	COIN	SLOW
13	4031	50/F	COIN	COIN	COIN	SLOW
14	4032	60/F	PEARL	PEARL	PEARL	SLOW
15	5019	42/M	COIN	COIN	COIN	SLOW
16	4084	42/F	PEARL	COIN	COIN	SLOW
17	4057	56/F	COIN	COIN	COIN	SLOW
18	4117	29/F	COIN	COIN	COIN	SLOW
19	4090	49/F	COIN	COIN	COIN	SLOW
20	4098	36/F	COIN	COIN	COIN	SLOW

TABLE SHOWS ANALYSIS OF NEIKKURI IN MANTHAARA KAASAM PATIENTS - DAY 3

S.NO	OP/IP NO	AGE/SEX	FIRST MINUTE	THIRD MINUTE	SEVENTH MINUTE	SPEARDING
21	4081	39/F	COIN	COIN	COIN	SLOW
22	4136	54/F	PEARL	COIN	COIN	SLOW
23	4111	39/F	PEARL	COIN	COIN	SLOW
24	4081	35/F	COIN	COIN	COIN	SLOW
25	4080	33/F	COIN	COIN	COIN	SLOW
26	4166	25/F	COIN	DISC	DISC	SLOW
27	4173	46/F	PEARL	COIN	COIN	SLOW
28	4183	53/F	COIN	DISC	DISC	SLOW
29	4098	40/F	COIN	COIN	COIN	SLOW
30	4179	57/F	COIN	COIN	COIN	SLOW
31	5118	47/F	PEARL	PEARL	PEARL	SLOW
32	4249	50/F	COIN	COIN	COIN	SLOW
33	4253	37/F	PEARL	PEARL	COIN	SLOW
34	4259	52/F	COIN	COIN	MITER	SLOW
35	4302	42/F	COIN	COIN	COIN	SLOW
36	4298	36/F	COIN	COIN	CIRCULAR	FAST
37	4289	50/F	PEARL	PEARL	PEARL	SLOW
38	5279	19/M	PEARL	PEARL	PEARL	SLOW
39	4359	42/F	COIN	EGG	RECTANGLE	FAST
40	4379	52/F	COIN	COIN	COIN	SLOW

TABLE SHOWS ANALYSIS OF HEALTHY VOLUNTEERS LAB INVESTIGATIONS

S.NO	IP NO	AGE/ SEX	HB	TRBC	TC	DC			PLT	ESR		SEROLOGY			MOTION		
						N	L	E		30	1	RA	CRP	ASO	OVA	CYST	OCCULT BLOOD
1	D19928	25/M	12.3	4.6	6600	50	44	6	2.8	2	4	NEGATIVE	NEGATIVE	NEGATIVE	NIL	NIL	ABSENT
2	D19929	60/M	12.7	4.6	5700	55	40	5	2.1	2	6	NEGATIVE	NEGATIVE	NEGATIVE	NIL	NIL	ABSENT
3	D30224	30/M	13.4	5.2	6400	73	25	2	2.6	2	4	NEGATIVE	NEGATIVE	NEGATIVE	NIL	NIL	ABSENT
4	C86813	27/M	15.8	5.3	6700	60	33	7	2.1	2	4	NEGATIVE	NEGATIVE	NEGATIVE	NIL	NIL	ABSENT
5	C72223	37/M	14	4.5	5800	42	53	5	2.5	2	6	NEGATIVE	NEGATIVE	NEGATIVE	NIL	NIL	ABSENT
6	D15789	27/ F	12.6	4.9	7600	62	36	2	1.8	12	26	NEGATIVE	NEGATIVE	NEGATIVE	NIL	NIL	ABSENT
7	D15797	24/ F	13	5.1	9800	65	30	5	2	2	6	NEGATIVE	NEGATIVE	NEGATIVE	NIL	NIL	ABSENT
8	D13393	26/ F	11.2	4.6	10000	64	33	3	2.4	2	10	NEGATIVE	NEGATIVE	NEGATIVE	NIL	NIL	ABSENT
9	C33345	38/M	11.5	4	7,700	42	53	5	1.9	6	12	NEGATIVE	NEGATIVE	NEGATIVE	NIL	NIL	ABSENT
10	C33793	37/M	8	5.1	3,300	46	50	4	2.2	2	4	NEGATIVE	NEGATIVE	NEGATIVE	NIL	NIL	ABSENT

TABLE SHOWS ANALYSIS OF HEALTHY VOLUNTEERS LAB INVESTIGATIONS																		
S.N O	OP NO	AGE/S EX	SUGAR		CHOLESTEROL					URIC ACID	UREA	CREAT ININE	SGO T	SGPT	ALP	PROTEIN		
			F	PP	TOTAL	HDL	LDL	VLDL	TGL							TOTAL	ALBUMI N	GLOBU LIN
1	D19928	25/M	89	-	149	33	76	12	62	5.1	27	0.8	21	24	176	5.5	3.5	2
2	D19929	60/M	104	-	190	39	92	19	98	5.6	27	0.8	16	19	166	5.6	3.5	2.1
3	D30224	30/M	106	-	225	40	106	23	118	6	21	0.8	33	35	195	7.5	5	2.5
4	C86811	27/M	100	-	199	34	153	26	130	5.2	14	0.4	23	18	178	6.4	4.2	2.2
5	C72223	37/M	80	-	170	36	87	39	198	4	19	0.8	22	27	175	7.5	4.2	3.3
6	D15789	27/ F	80	-	161	35	82	21	107	5.2	15	0.5	10	12	188	6.2	4.8	1.4
7	D15797	24/ F	76	-	120	30	70	12	63	6.5	17	0.6	16	18	193	7.2	3.9	3.3
8	D13393	26/ F	81	-	120	30	70	12	62	6	14	0.4	20	22	207	7	5.1	1.9
9	C33345	38/M	89	110	223	30	141	52	259	5.5	26	0.7	26	23	189	6.9	4.8	2.1
10	C33793	37/M	72	115	208	42	150	16	78	5.4	30	0.8	27	23	219	7.8	4.6	3.2

TABLE SHOWS ANALYSIS OF HEALTHY VOLUNTEERS LAB INVESTIGATIONS

S.NO	OP/IP NO	AGE/SEX	PH	SPECIFIC GRAVITY	ALBUMIN	SUGAR	ACETONE	BILE SALT	BILE PIGMENT	UROBILINOGEN	OCCULT BLOOD	DEPOSITS	
												PUS	EPI
1	D19928	25/F	5.4	1.016	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	1-2	2-3
2	D 19929	60/M	6	1.018	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	2-4	3-5
3	D30224	30/M	5.6	1.012	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	2-4	2-4
4	C 86813	27/M	4.6	1.014	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	3-4	3-6
5	C72223	37/M	4.9	1.01	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	1-2	2-4
6	D15789	27/ F	5.5	1.012	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	2-4	2-4
7	D15797	24/ F	6.1	1.022	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	1-2	3-5
8	D13393	26/ F	4.8	1.016	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	4-5	5-10
9	C33345	38/M	5.2	1.01	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	4-8	3-6
10	C33793	37/M	5.1	1.018	NIL	NIL	ABSENT	NIL	NEGATIVE	NORMAL	ABSENT	4-5	4-6

TABLE SHOWS ANALYSIS OF NEERKKURI HEALTHY VOLUNTEERS DAY - 1

S.NO	OP/IP NO	AGE/SEX	COLOUR(NIRAM)	SPECIFIC GRAVITY(AEDAI)	ODOUR(MANAM)	FROTH(NURAI)	ENJAL
1	D19928	25/M	PALE YELLOW	1.016	AROMATIC	CLEAR	1.1L
2	D19929	60/M	PALE YELLOW	1.018	AROMATIC	CLEAR	1.2L
3	D 30224	30/M	DARK YELLOW	1.012	AROMATIC	CLEAR	1.3L
4	C 86813	27/M	PALE YELLOW	1.014	AROMATIC	CLEAR	1.4L
5	C72223	37/M	PALE YELLOW	1.01	AROMATIC	CLEAR	1.2L
6	D15789	27/ F	PALE YELLOW	1.012	AROMATIC	CLEAR	1.3L
7	D15797	24/ F	PALE YELLOW	1.022	AROMATIC	CLEAR	1.3L
8	D13393	26/ F	PALE YELLOW	1.016	AROMATIC	CLEAR	1L
9	C33345	38/M	PALE YELLOW	1.01	AROMATIC	CLEAR	1.4L
10	C33793	37/M	PALE YELLOW	1.018	AROMATIC	CLEAR	1.2L

TABLE SHOWS ANALYSIS OF NEERKKURI HEALTHY VOLUNTEERS DAY - 2

S.NO	OP/IP NO	AGE/SEX	COLOUR (NIRAM)	SPECIFIC GRAVITY (AEDAI)	ODOUR (MANAM)	FROTH (NURAI)	ENJAL
1	D19928	25/M	PALE YELLOW	1.012	AROMATIC	CLEAR	1.3L
2	D19929	60/M	PALE YELLOW	1.022	AROMATIC	CLEAR	1.2L
3	D30224	30/M	PALE YELLOW	1.014	AROMATIC	CLEAR	1.3L
4	C86813	27/M	PALE YELLOW	1.016	AROMATIC	CLEAR	1.4L
5	C72223	37/M	PALE YELLOW	1.012	AROMATIC	CLEAR	1.4L
6	D15789	27/ F	PALE YELLOW	1.018	AROMATIC	CLEAR	1.4L
7	D15797	24/ F	PALE YELLOW	1.02	AROMATIC	CLEAR	1.3L
8	D13393	26/ F	PALE YELLOW	1.01	AROMATIC	CLEAR	1.4L
9	C33345	38/M	PALE YELLOW	1.012	AROMATIC	CLEAR	1.5L
10	C33793	37/M	PALE YELLOW	1.016	AROMATIC	CLEAR	1.2L

TABLE SHOWS ANALYSIS OF NEERKKURI HEALTHY VOLUNTEERS DAY - 3

S.NO	OP/IP NO	AGE/SEX	COLOUR(NIRAM)	SPECIFIC GRAVITY (AEDAI)	ODOUR (MANAM)	FROTH (NURAI)	ENJAL
1	D19928	25/M	PALE YELLOW	1.012	AROMATIC	CLEAR	1.4L
2	D19929	60/M	DARK YELLOW	1.014	AROMATIC	CLEAR	1.3L
3	D30224	30/M	PALE YELLOW	1.018	AROMATIC	CLEAR	1.5L
4	C86813	27/M	PALE YELLOW	1.022	AROMATIC	CLEAR	1.2L
5	C72223	37/M	PALE YELLOW	1.012	AROMATIC	CLEAR	1.3L
6	D15789	27/ F	PALE YELLOW	1.01	AROMATIC	CLEAR	1.3L
7	D15797	24/ F	PALE YELLOW	1.02	AROMATIC	CLEAR	1.5L
8	D13393	26/ F	PALE YELLOW	1.014	AROMATIC	CLEAR	1.4L
9	C33345	38/M	PALE YELLOW	1.014	AROMATIC	CLEAR	1.3L
10	C33793	37/M	PALE YELLOW	1.022	AROMATIC	CLEAR	1.4L

TABLE SHOWS ANALYSIS OF NEIKKURI HEALTHY VOLUNTEERS DAY - 1

S.NO	OP/IP NO	AGE/SEX	FIRST MINUTE	THIRD MINUTE	SEVENTH MINUTE	SPREADING
1	D19928	25/M	COIN	COIN	COIN	SLOW
2	D19929	60/M	COIN	COIN	COIN	SLOW
3	D30224	30/M	COIN	COIN	COIN	SLOW
4	C86813	27/M	COIN	COIN	COIN	SLOW
5	C72223	37/M	COIN	COIN	COIN	SLOW
6	D15789	27/ F	COIN	COIN	COIN	SLOW
7	D15797	24/ F	COIN	COIN	COIN	SLOW
8	D13393	26/ F	COIN	COIN	CIRCULAR	SLOW
9	C33345	38/M	COIN	EGG	CIRCULAR	SLOW
10	C33793	37/M	COIN	COIN	CIRCULAR	SLOW

TABLE SHOWS ANALYSIS OF NEIKKURI HEALTHY VOLUNTEERS DAY - 2

S.NO	OP/IP NO	AGE/SEX	FIRST MINUTE	THIRD MINUTE	SEVENTH MINUTE	SPREADING
1	D19928	25/M	COIN	COIN	CIRCULAR	SLOW
2	D19929	60/M	COIN	COIN	COIN	SLOW
3	C30224	30/M	COIN	CIRCULAR	CIRCULAR	SLOW
4	C86813	27/M	COIN	COIN	COIN	SLOW
5	C72223	37/M	COIN	COIN	CIRCULAR	SLOW
6	D15789	27/ F	COIN	COIN	COIN	SLOW
7	D15797	24/ F	COIN	COIN	COIN	SLOW
8	D13393	26/ F	COIN	CIRCULAR	CIRCULAR	SLOW
9	C33345	38/M	COIN	COIN	CIRCULAR	SLOW
10	C33793	37/M	COIN	CIRCULAR	CIRCULAR	SLOW

TABLE SHOWS ANALYSIS OF NEIKKURI HEALTHY VOLUNTEERS DAY - 3

S.NO	OP/IP NO	AGE/SEX	FIRST MINUTE	THIRD MINUTE	SEVENTH MINUTE	SPREADING
1	D19928	25/M	JASMINE BUD	JASMINE BUD	LUTE	SLOW
2	D19929	60/M	COIN	COIN	COIN	SLOW
3	D30224	30/M	COIN	COIN	COIN	SLOW
4	C86813	27/M	COIN	COIN	COIN	SLOW
5	C72223	37/M	COIN	COIN	RING	SLOW
6	D15789	27/ F	COIN	COIN	COIN	SLOW
7	D15797	24/ F	COIN	COIN	JASMINE BUD	SLOW
8	D13393	26/ F	COIN	COIN	CIRCULAR	SLOW
9	C33345	38/M	COIN	EGG	RING	SLOW
10	C33793	37/M	COIN	COIN	CIRCULAR	SLOW

NEIKKURI PICTURES...

neerkkuri neikkuri

- Manthara Kaasam



MANTHAARA KAASAM PATIENTS...

neerkkuri neikkuri

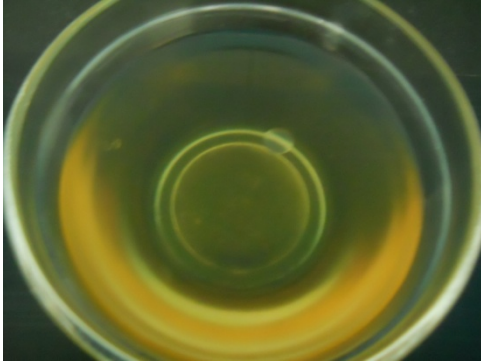
- Manthara Kaasam



1.IPD NO: 4036/Mrs.M.Jothi

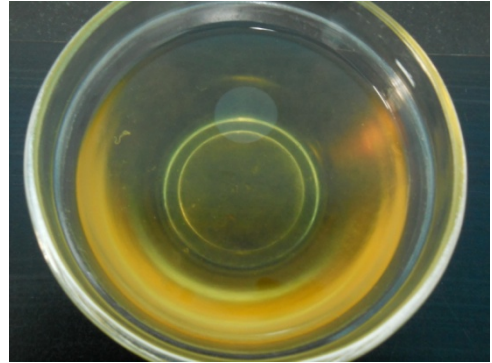
DAY 1 : 1 minute

Shape: Pearl



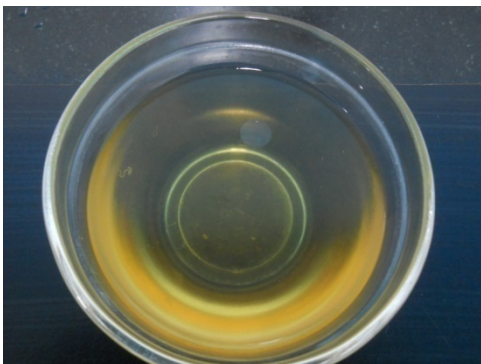
DAY 2 : 1 minute

Shape: Coin



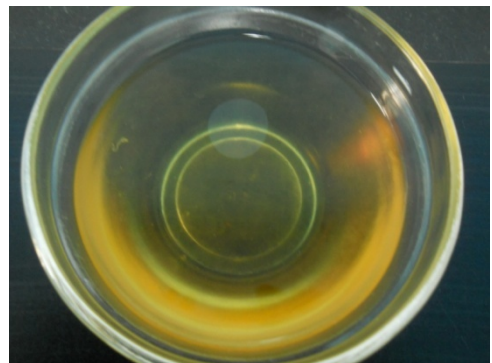
DAY 1 : 3 minutes

Shape: Pearl



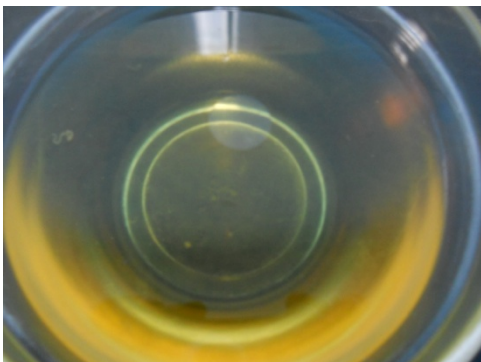
DAY 2 : 3 minutes

Shape : Coin



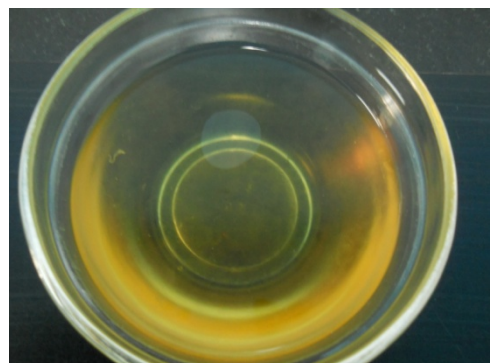
DAY 1 : 7 minutes

Shape : Circular



DAY 2 : 7 minutes

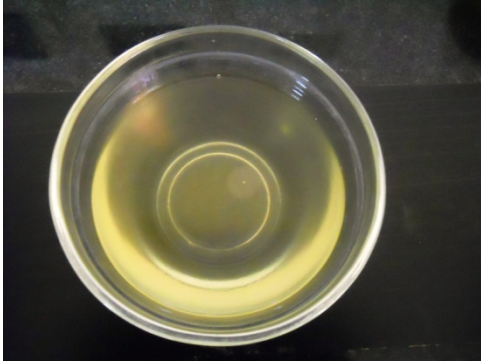
Shape : Coin



2.IPD NO: 4068/Mrs.A.Eswari

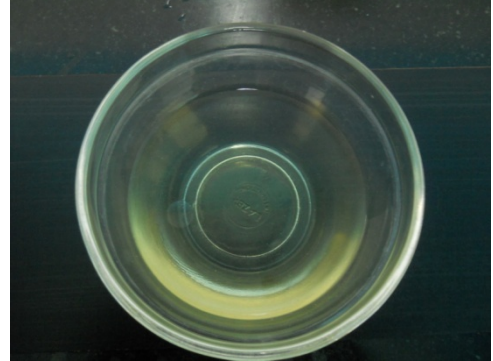
DAY 3 : 1 minute

Shape : Pearl



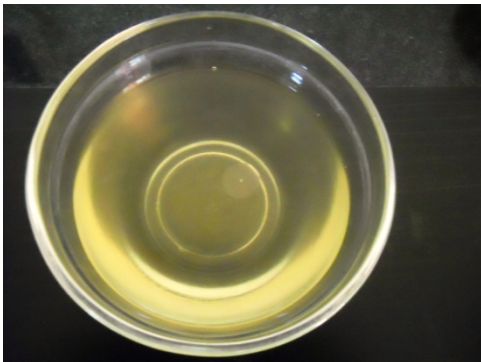
DAY 1 : 1 minute

Shape : Pearl



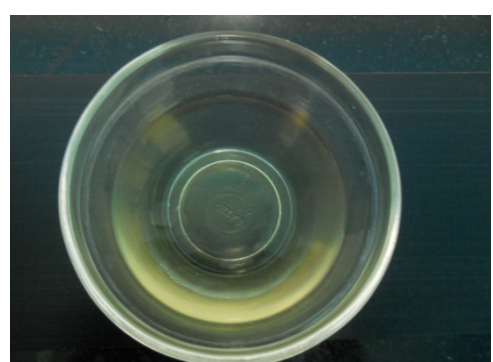
DAY 3 : 3 minutes

Shape : Pearl



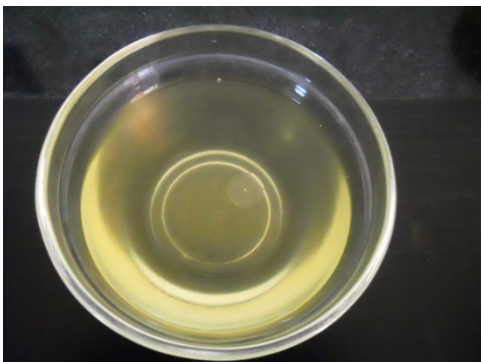
DAY 1 : 3 minutes

Shape : Pearl



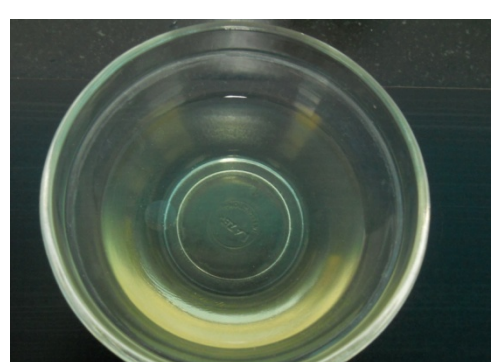
DAY 3 : 7 minutes

Shape : Pearl



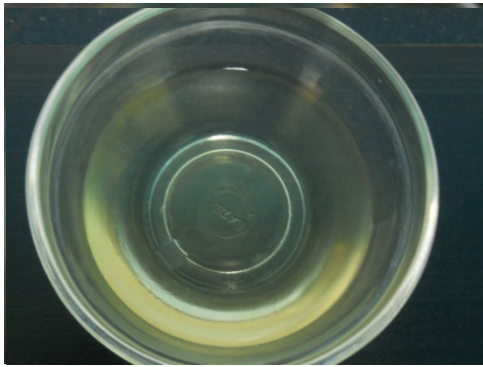
DAY 1 : 7 minutes

Shape : Pearl



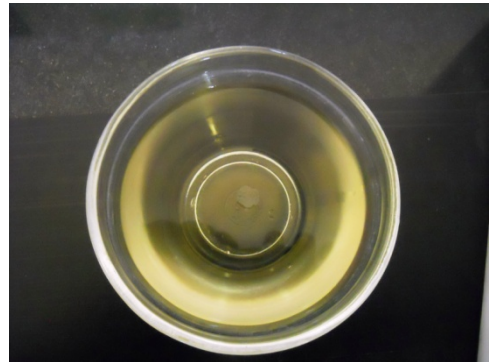
DAY 2 : 1 minute

Shape : Pearl



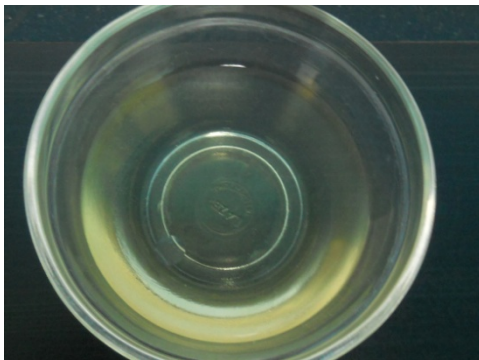
DAY 3 : 1 minute

Shape : Pearl



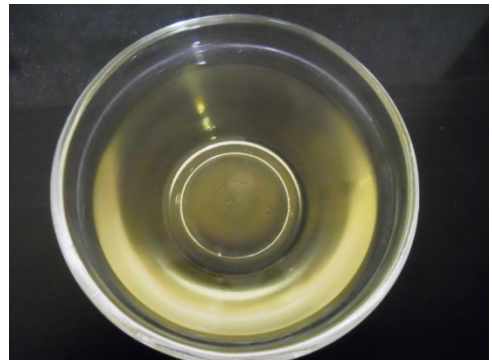
DAY 2 : 3 minutes

Shape : Pearl



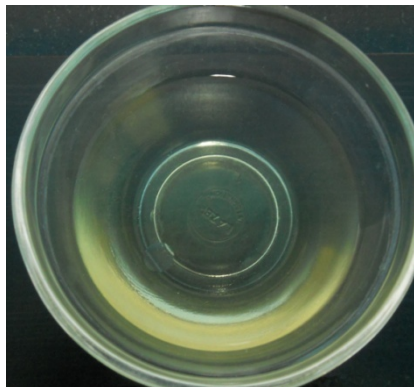
DAY 3 : 3 minutes

Shape : Pearl



DAY 2 : 7 minutes

Shape : Pearl



DAY 3 : 7 minutes

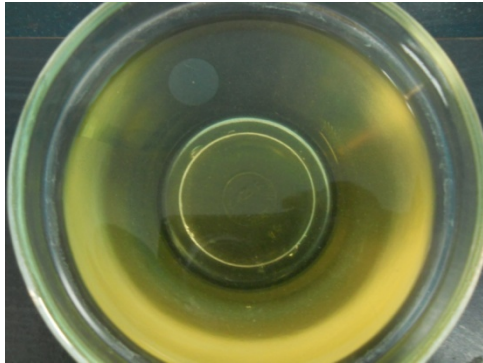
Shape : Pearl



3.IPD NO : 4040/Mrs.A.J.Roselet

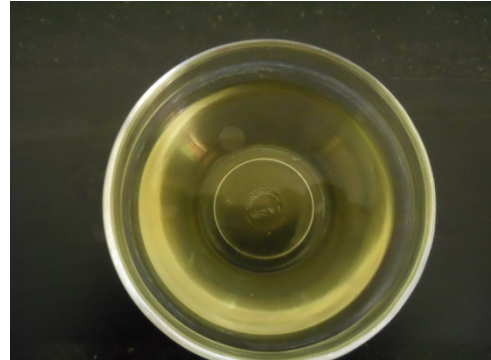
DAY 1 : 1 minute

Shape : Pearl



DAY 2 : 1 minute

Shape: Pearl



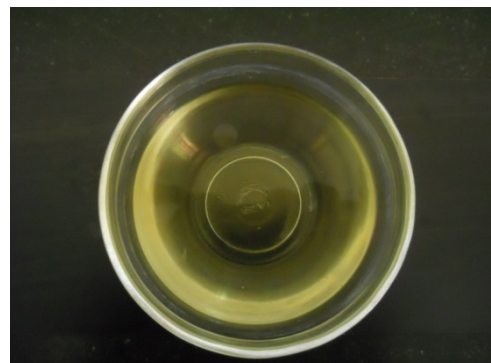
DAY 1 : 3 minutes

Shape : Pearl



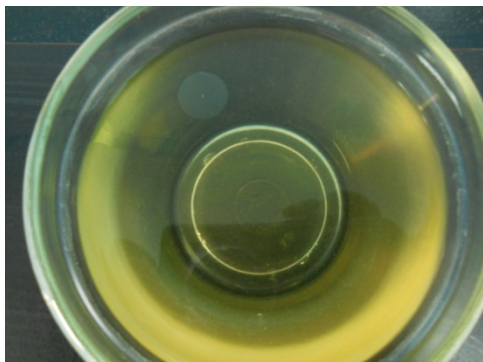
DAY 2 : 3 minutes

Shape : Pearl



DAY 1 : 7 minutes

Shape : Pearl



DAY 2 : 7 minutes

Shape : Pearl



4.IPD NO : 5026/Mr.M.Veerappan

DAY 3 : 1 minute

Shape : Pearl



DAY 1 : 1 minute

Shape : Pearl



DAY 3 : 3 minutes

Shape : Pearl



DAY 1 : 3 minutes

Shape : Pearl



DAY 3 : 7 minutes

Shape : Pearl



DAY 1 : 7 minutes

Shape : Pearl



DAY 2 : 1 minute

Shape : Disc



DAY 3 : 1 minute

Shape : Pearl



DAY 2 : 3 minutes

Shape : Disc



DAY 3 : 3 minutes

Shape : Pearl



DAY 2 : 7 minutes

Shape : Disc



DAY 3 : 7 minutes

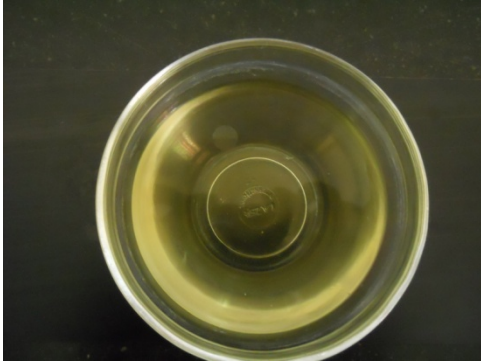
Shape : Pearl



5.IPD NO: 5027/Mr.N.Megan

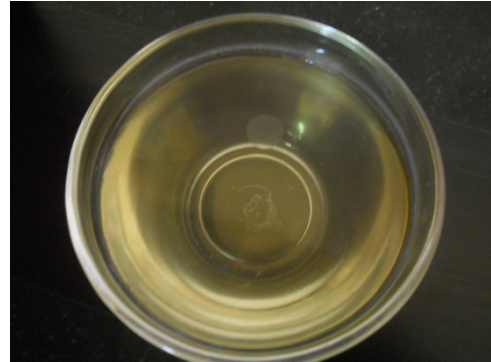
DAY 1 : 1 minute

Shape : Pearl



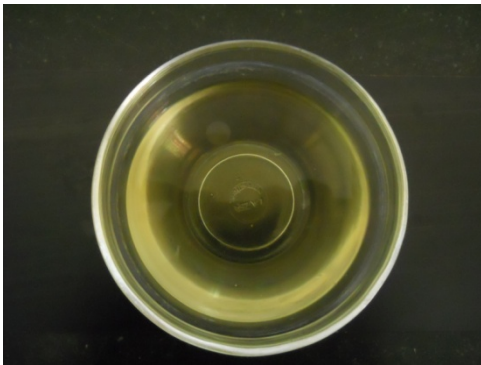
DAY 2 : 1 minute

Shape : Pearl



DAY 1 : 3 minutes

Shape : Pearl



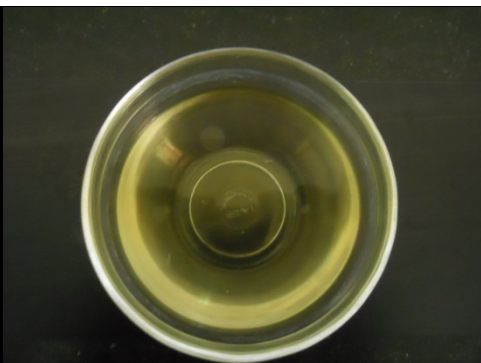
DAY 2 : 3 minutes

Shape : Pearl



DAY 1 : 7 minutes

Shape : Pearl



DAY 2 : 7 minutes

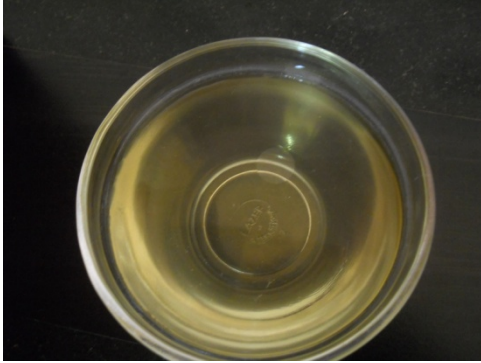
Shape : Pearl



6.OPD NO: /Mr.P.Eganathan

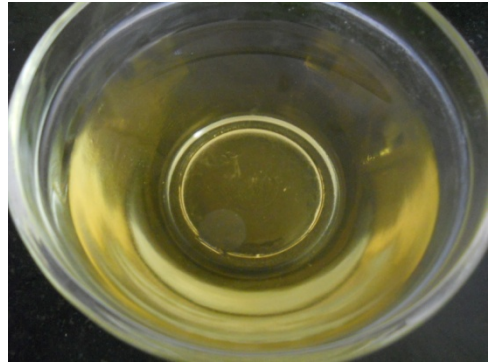
DAY 3 : 1 minute

Shape : Pearl



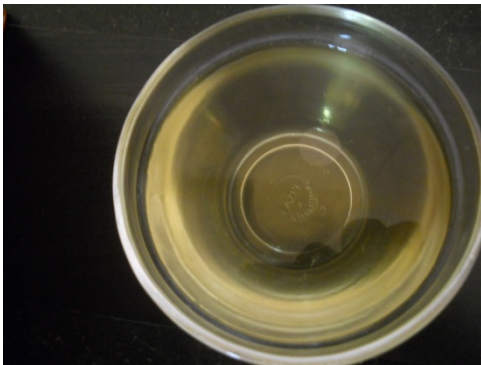
DAY 1 : 1 minute

Shape : Pearl



DAY 3 : 3 minutes

Shape : Pearl



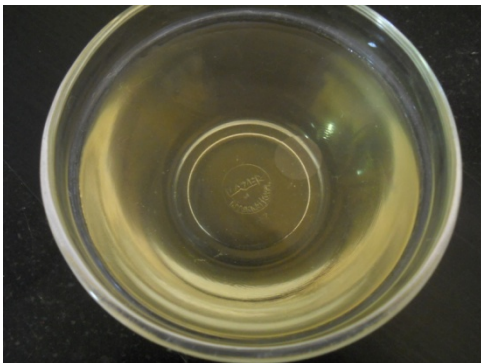
DAY 1 : 3 minutes

Shape : Pearl



DAY 3 : 7 minutes

Shape : Pearl



DAY 1 : 7 minutes

Shape : Pearl



DAY 2 : 1 minute

Shape :Disc



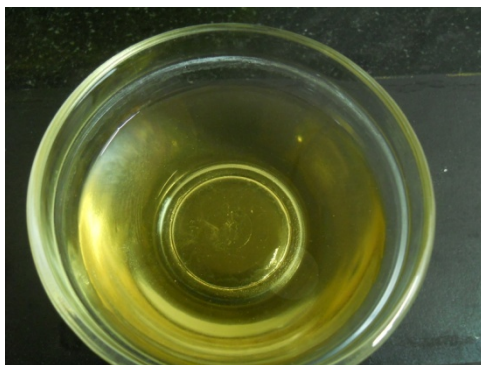
DAY 3 : 1 minute

Shape : Disc



DAY 2 : 3 minutes

Shape :Disc



DAY 3 : 3 minutes

Shape : Disc



DAY 2 : 7 minutes

Shape :Circular



DAY 3 : 7 minutes

Shape : Disc



7.OPD NO : C 80999/Miss.B.Poorani

DAY 1 : 1 minute

Shape :Pearl



DAY 2 : 1 minute

Shape :Disc



DAY 1 : 3 minutes

Shape :Pearl



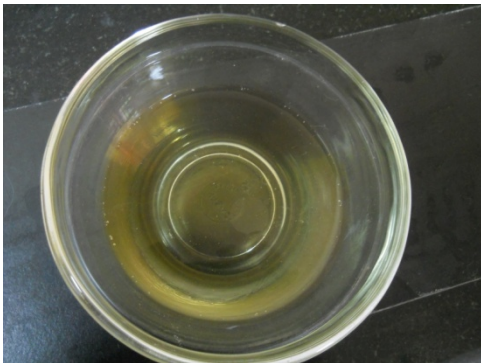
DAY 2 : 3 minutes

Shape : Disc



DAY 1 : 7 minutes

Shape :Pearl



DAY 2 : 7 minutes

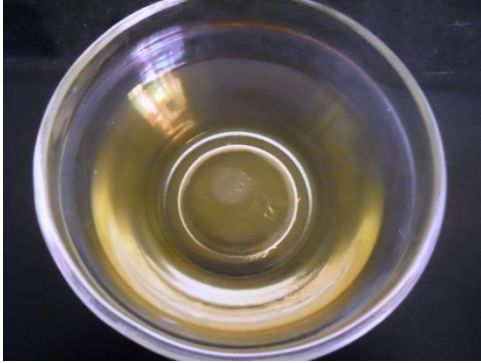
Shape : Disc



8.OPD NO: C89774/Mr.J.Jayaprakash

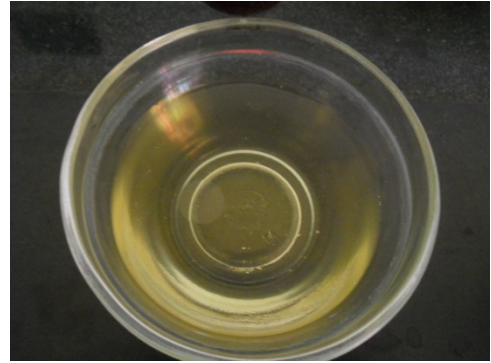
DAY 3 : 1 minute

Shape : Pearl



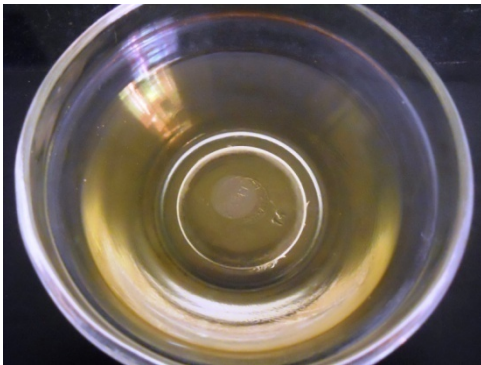
DAY 1 : 1 minute

Shape : Disc



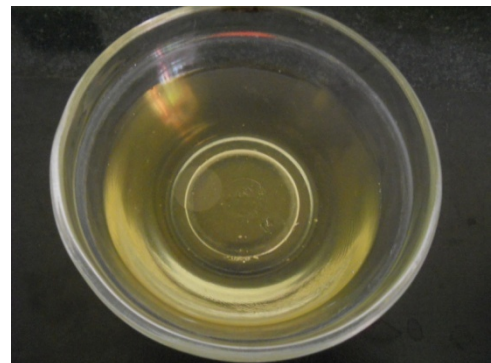
DAY 3 : 3 minutes

Shape : Pearl



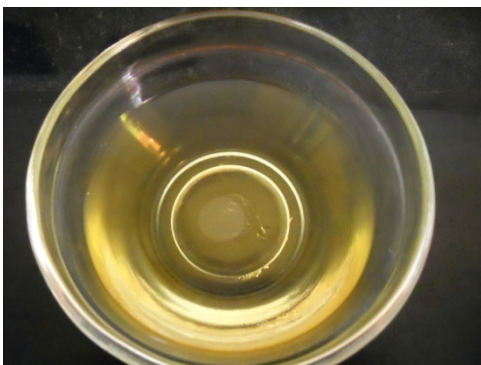
DAY 1 : 3 minutes

Shape : Disc



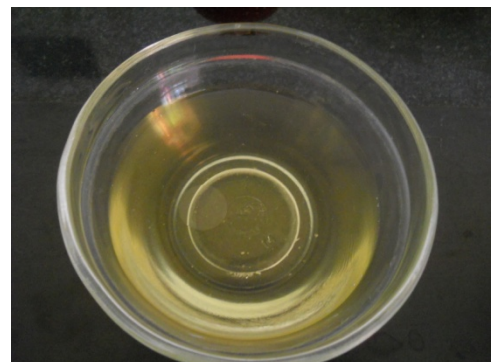
DAY 3 : 7 minutes

Shape : Pearl



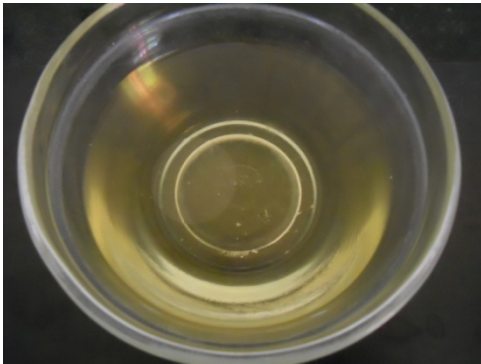
DAY 1: 7 minutes

Shape : Disc



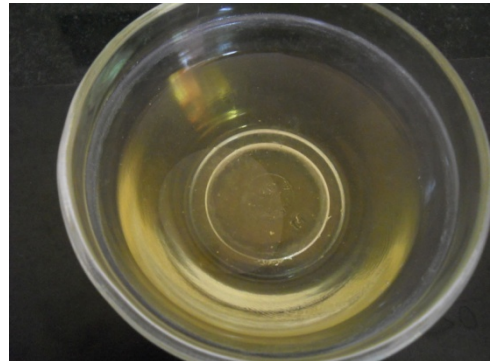
DAY 2 : 1 minute

Shape : Coin



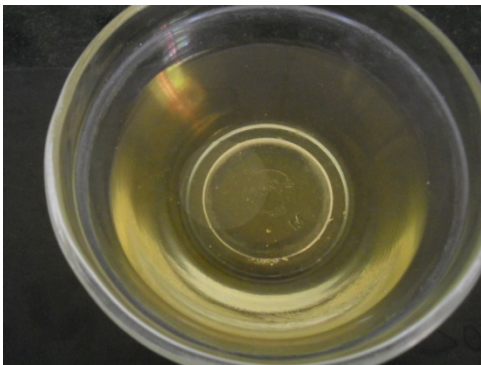
DAY 3 : 1 minute

Shape : Oval



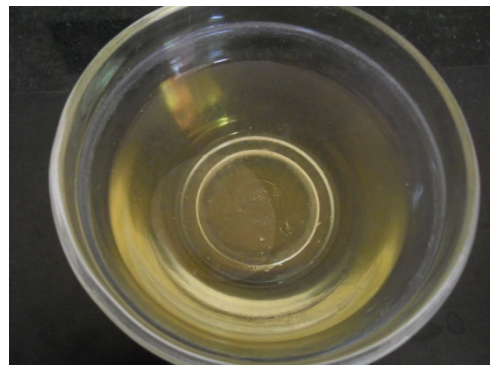
DAY 2 : 3 minutes

Shape : Coin



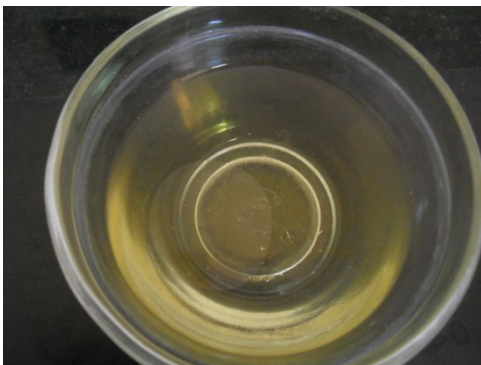
DAY 3 : 3 minutes

Shape : Oval



DAY 2 : 7 minutes

Shape : Circular



DAY 3 : 7 minutes

Shape : Oval



9.OPD NO:C69926/Mr.K.Vijayan

DAY 1 : 1 minute

Shape : Pearl



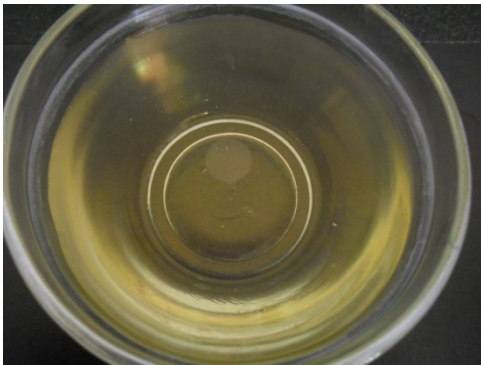
DAY 2 : 1 minute

Shape : Pearl



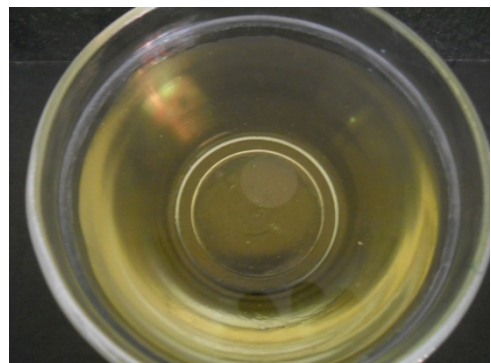
DAY 1 : 3 minutes

Shape : Pearl



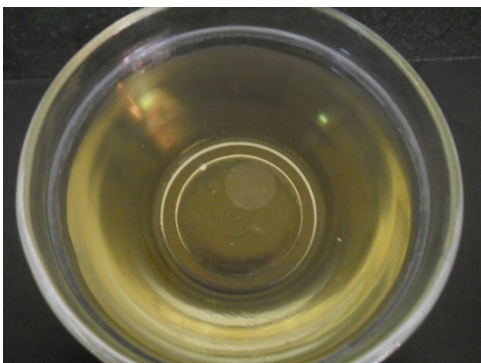
DAY 2 : 3 minutes

Shape : Disc



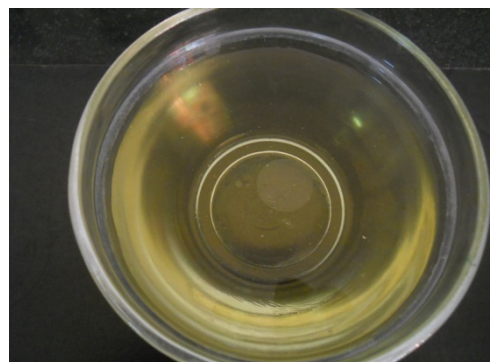
DAY 1: 7 minutes

Shape : Disc



DAY 2 : 7 minutes

Shape : Disc



10.OPD NO: C 88048/Mr.C.Ramesh

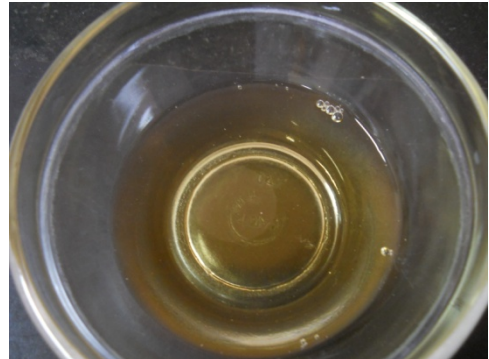
DAY 3 : 1 minute

Shape :Disc



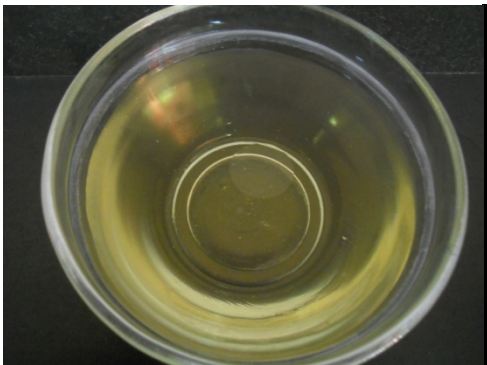
DAY 1 : 1 minute

Shape : Circular



DAY 3 : 3 minutes

Shape :Disc



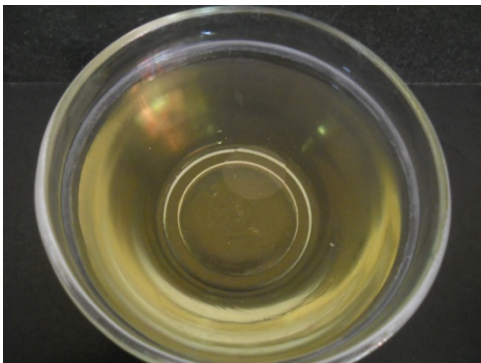
DAY 1 : 3 minutes

Shape :Circular



DAY 3 : 7 minutes

Shape : Disc



DAY 1: 7 minutes

Shape : Circular



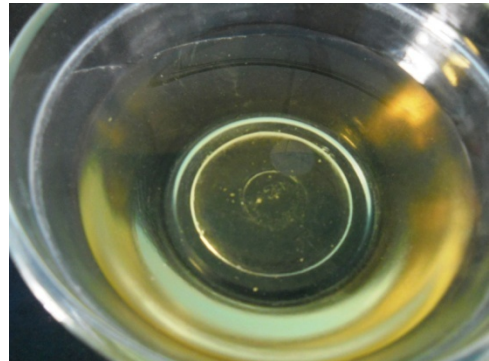
DAY 2 : 1 minute

Shape : Coin



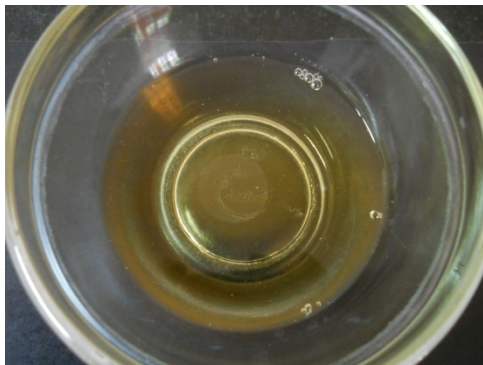
DAY 3 : 1 minute

Shape : Pearl



DAY 2 : 3 minutes

Shape : Circular



DAY 3 : 3 minutes

Shape : Pearl



DAY 2 : 7 minutes

Shape : Circular



DAY 3 : 7 minutes

Shape : Pearl



DIFFERENT COLOUR OF THE URINE

COLOUR LESS URINE



STRAW COLOURED URINE



YELLOW COLOUR URINE



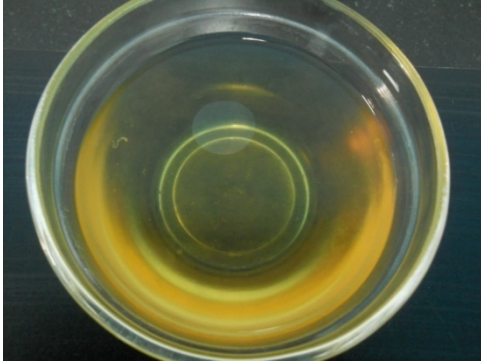
DARK YELLOW COLOUR URINE



11.OPD NO: C88049/Mr.S.Veerapandian

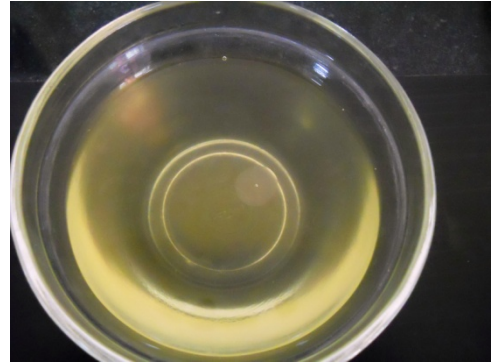
DAY 1 : 1 minute

Shape:Disc



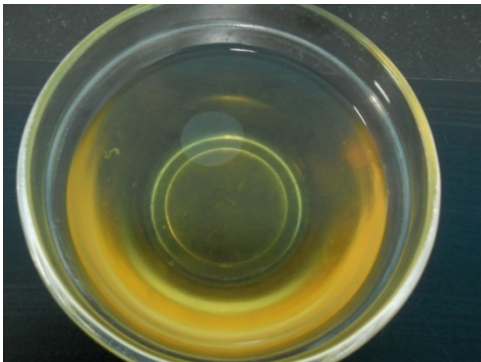
DAY 2 : 1 minute

Shape:Pearl



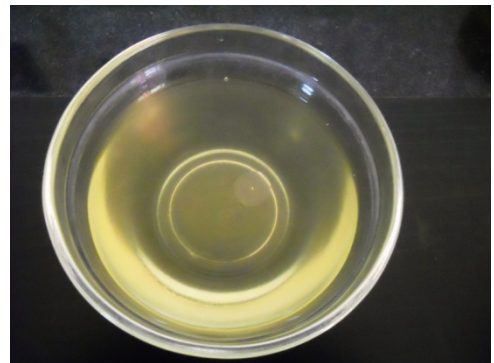
DAY 1 : 3 minutes

Shape: Disc



DAY 2 : 3 minutes

Shape : Pearl



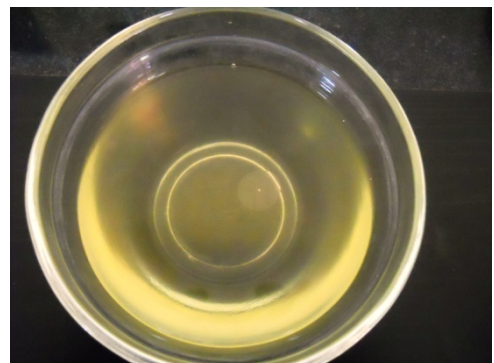
DAY 1 : 7 minutes

Shape : Disc



DAY 2 : 7 minutes

Shape : Pearl



12.OPD NO: C66018/Mr.P.Kaviarasan

DAY 3 : 1 minute

Shape :Pearl



DAY 1 : 1 minute

Shape : Pearl



DAY 3 :3 minutes

Shape :Pearl



DAY 1 : 3 minutes

Shape : Pearl



DAY 3 : 7 minutes

Shape :Pearl



DAY 1 : 7 minutes

Shape : Pearl



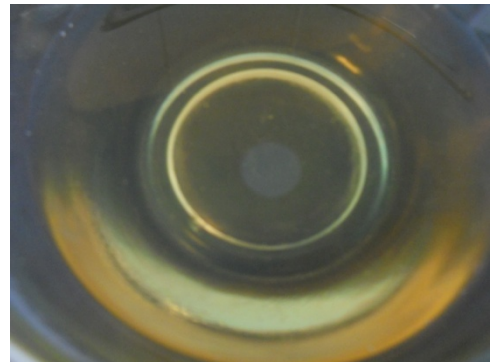
DAY 2 : 1 minute

Shape : Pearl



DAY 3 : 1 minute

Shape : Pearl



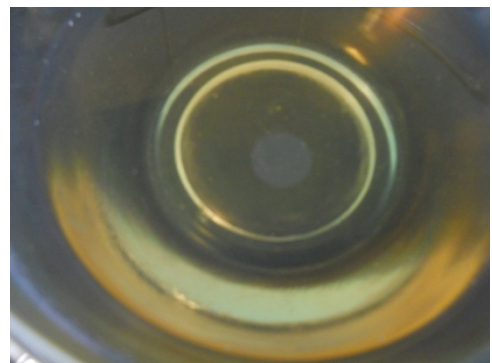
DAY 2 : 3 minutes

Shape : Pearl



DAY 3 : 3 minutes

Shape : Pearl



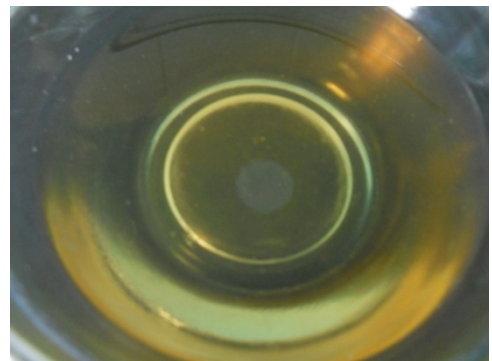
DAY 2 : 7 minutes

Shape : Pearl



DAY 3 : 7 minutes

Shape : Pearl



13.OPD NO : C60988/Mrs.S.Jeevitha

DAY 1 : 1 minute

Shape : Pearl



DAY 2 : 1 minute

Shape: Oval



DAY 1 : 3 minutes

Shape : Pearl



DAY 2 : 3 minutes

Shape : Oval



DAY 1 : 7 minutes

Shape : Pearl



DAY 2 : 7 minutes

Shape : Oval



14.OPD NO : C89036/Mr.S.Krithivasan

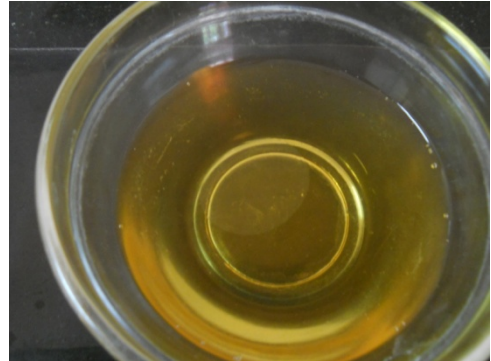
DAY 3 : 1 minute

Shape : Kidney



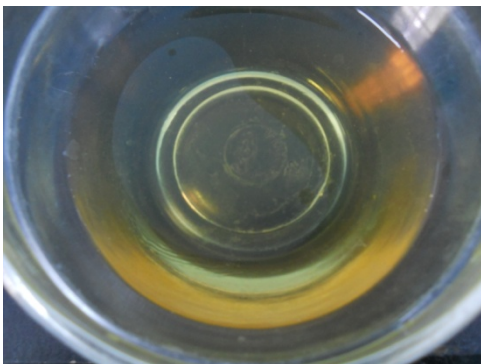
DAY 1 : 1 minute

Shape : Oval



DAY 3 : 3 minutes

Shape : Kidney



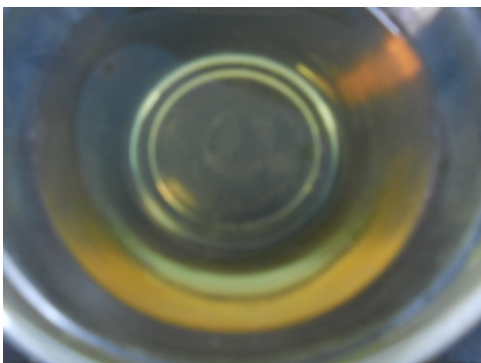
DAY 1 : 3 minutes

Shape : Oval



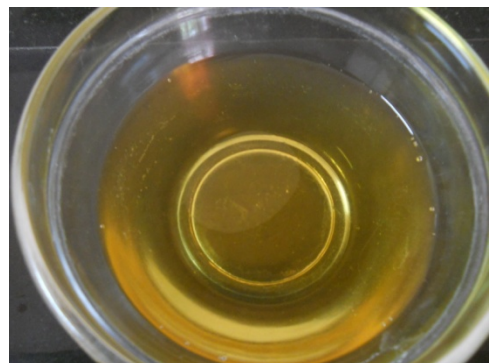
DAY 3 : 7 minutes

Shape : Kidney



DAY 1 : 7 minutes

Shape : Oval



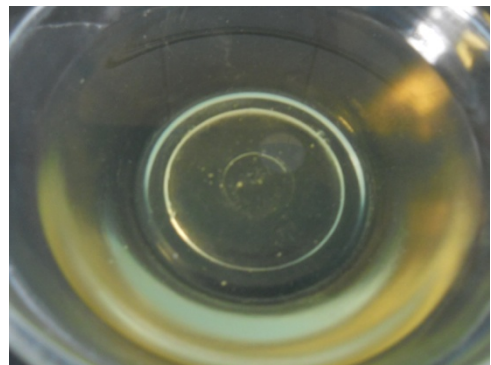
DAY 2 : 1 minute

Shape : Oval



DAY 3 : 1 minute

Shape : Pearl



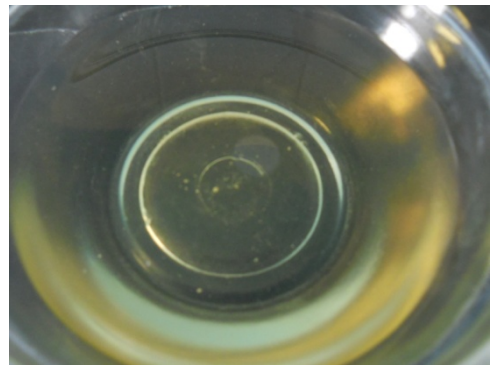
DAY 2 : 3 minutes

Shape : Oval



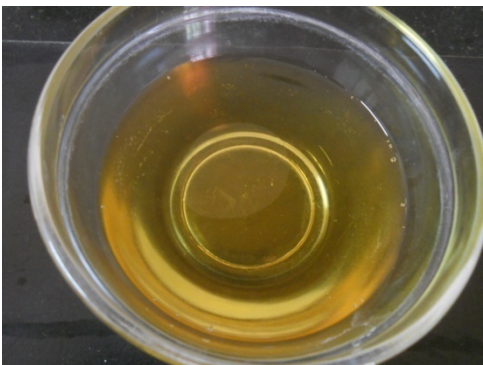
DAY 3 : 3 minutes

Shape : Pearl



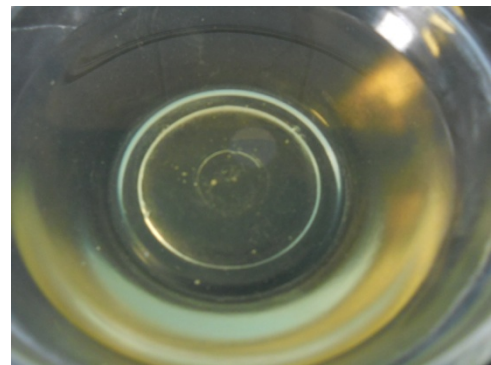
DAY 2 : 7 minutes

Shape : Oval



DAY 3 : 7 minutes

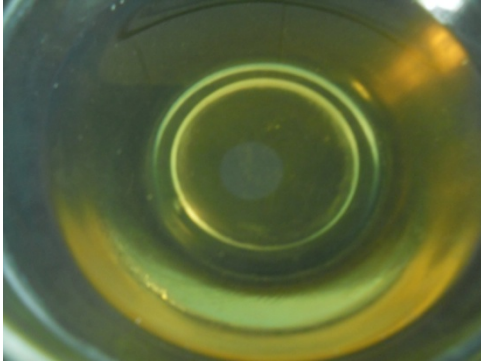
Shape : Pearl



15.OPD NO: 5039/Mr.K. Selvam

DAY 1 : 1 minute

Shape : Pearl



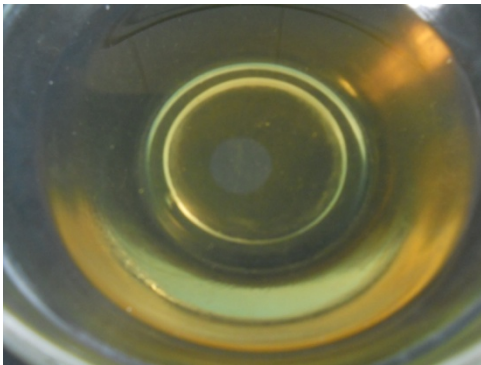
DAY 2 : 1 minute

Shape : Disc



DAY 1 : 3 minutes

Shape : Pearl



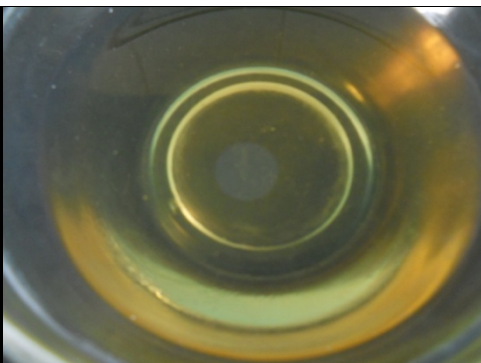
DAY 2 : 3 minutes

Shape : Disc



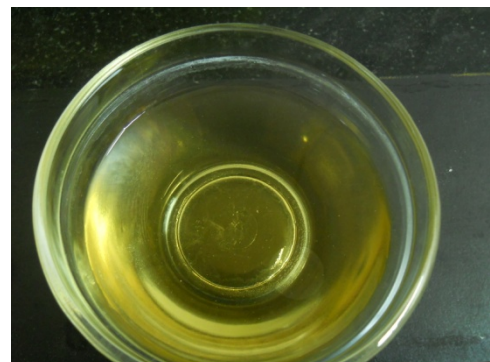
DAY 1 : 7 minutes

Shape : Pearl



DAY 2 : 7 minutes

Shape : Disc



16.OPD NO: C89980/Mrs.S.Amala

DAY 3 : 1 minute

Shape : Coin



DAY 1 : 1 minute

Shape : Pearl



DAY 3 : 3 minutes

Shape : Coin



DAY 1 : 3 minutes

Shape : Pearl



DAY 3 : 7 minutes

Shape : Coin



DAY 1 : 7 minutes

Shape : Pearl



DAY 2 : 1 minute

Shape : Pearl



DAY 3 : 1 minute

Shape : Disc



DAY 2 : 3 minutes

Shape : Pearl



DAY 3 : 3 minutes

Shape : Disc



DAY 2 : 7 minutes

Shape : Pearl



DAY 3 : 7 minutes

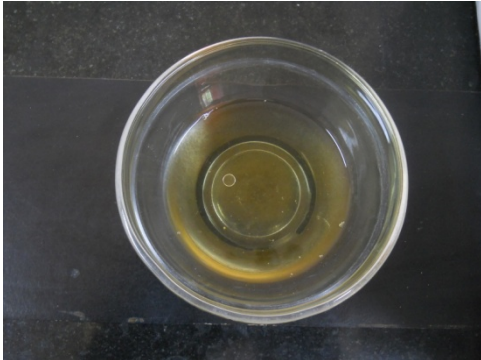
Shape : Disc



17.OPD NO : C94039/Mrs.M. Rukmani

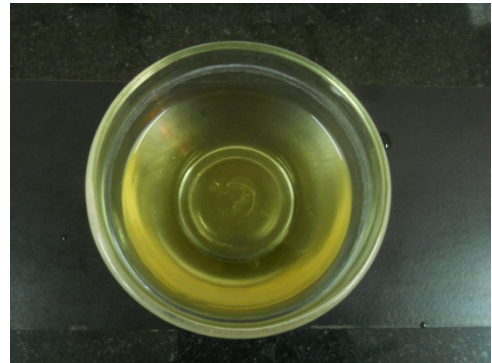
DAY 1 : 1 minute

Shape : Pearl



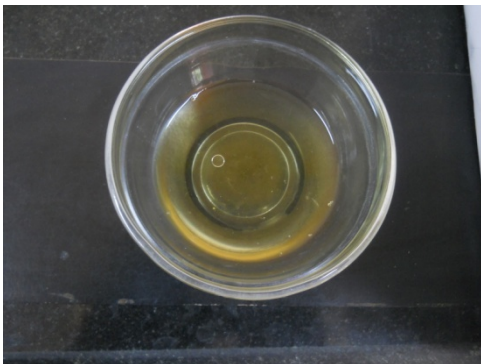
DAY 2 : 1 minute

Shape : Pearl



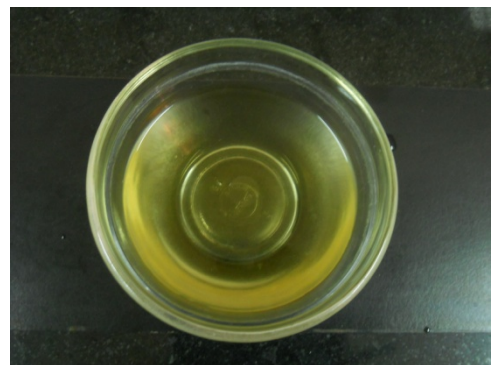
DAY 1 : 3 minutes

Shape : Pearl



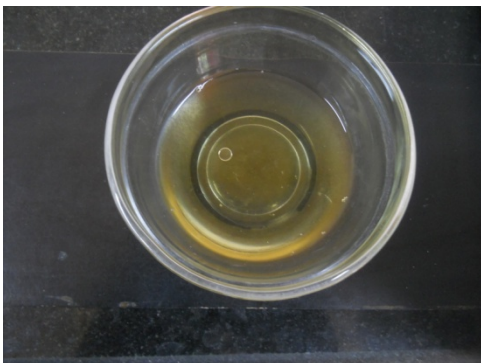
DAY 2 : 3 minutes

Shape : Pearl



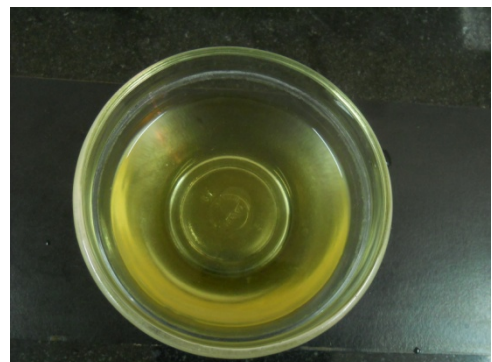
DAY 1 : 7 minutes

Shape : Pearl



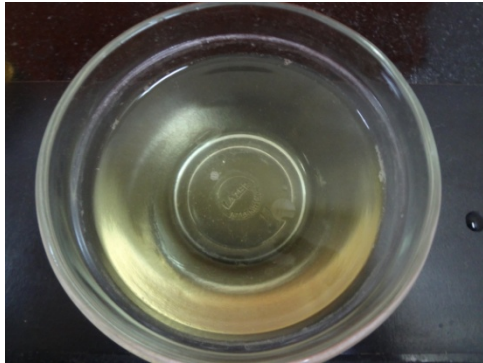
DAY 2 : 7 minutes

Shape : Pearl



DAY 3 : 1 minute

Shape : Pearl



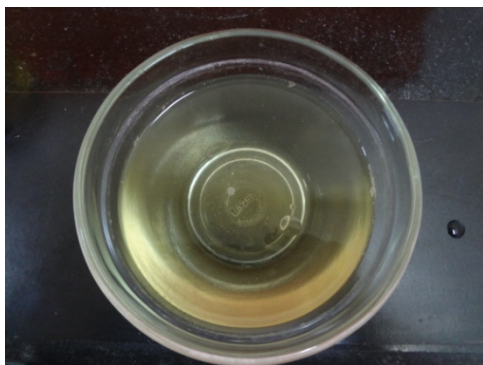
DAY 1 : 1 minute

Shape : Pearl



DAY 3 : 3 minutes

Shape : Pearl



DAY 1 : 3 minutes

Shape : Pearl



DAY 3 : 7 minutes

Shape : Pearl



DAY 1: 7 minutes

Shape : Pearl



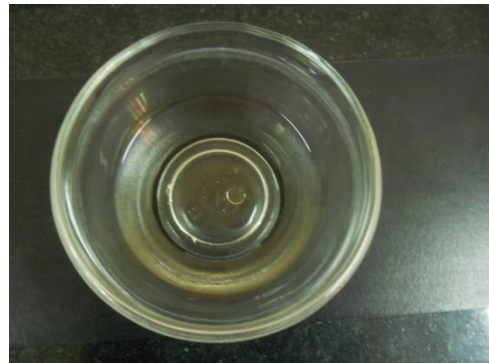
DAY 2 : 1 minute

Shape : Pearl



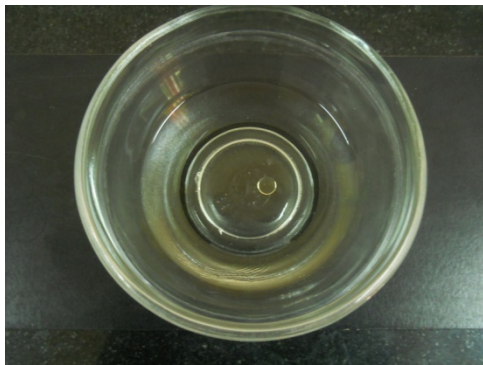
DAY 3 : 1 minute

Shape : Pearl



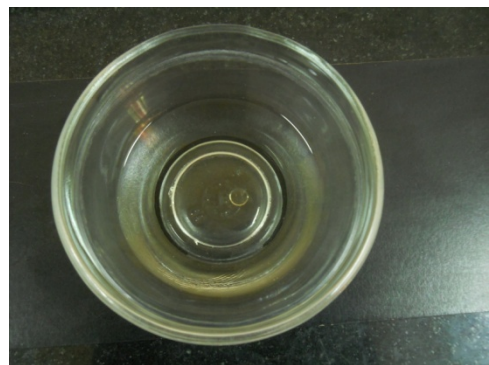
DAY 2 : 3 minutes

Shape : Pearl



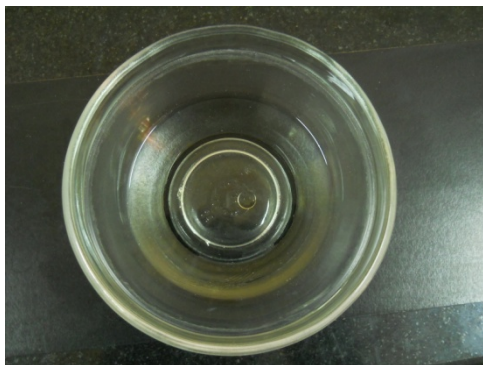
DAY 3 : 3 minutes

Shape: Pearl



DAY 2 : 7 minutes

Shape : Pearl



DAY 3 : 7 minutes

Shape : Pearl



19.OPD NO: C92028/Mrs.V.Kavitha

DAY 1 : 1 minute

Shape : Disc



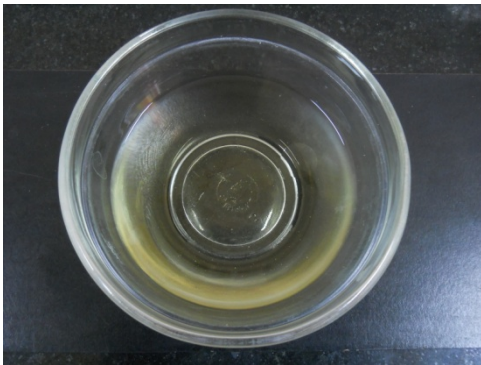
DAY 2 : 1 minute

Shape : Disc



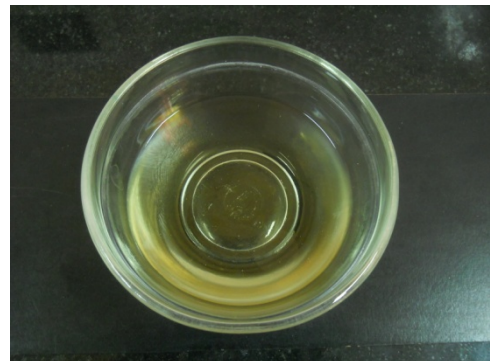
DAY 1 : 3 minutes

Shape : Disc



DAY 2 : 3 minutes

Shape : Disc



DAY 1: 7 minutes

Shape : Disc



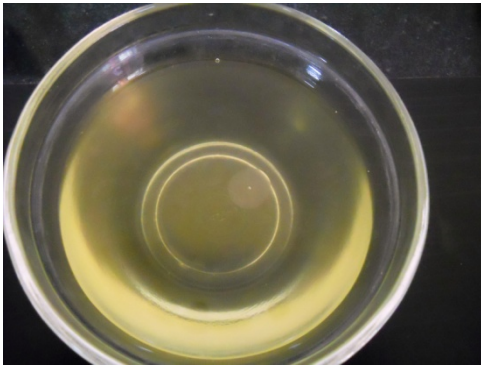
DAY 2 : 7 minutes

Shape : Disc



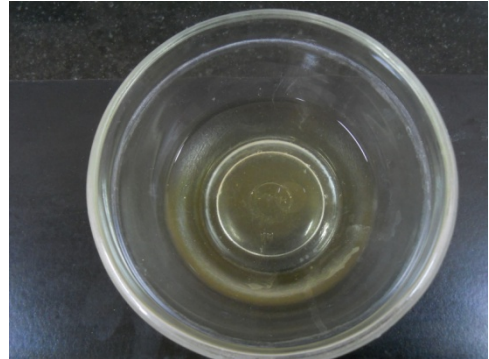
DAY 3 : 1 minute

Shape : Coin



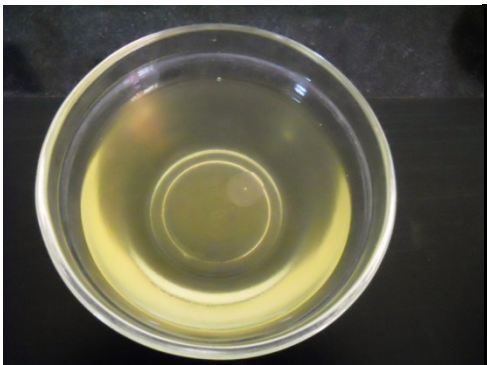
DAY 1 : 1 minute

Shape : Disc



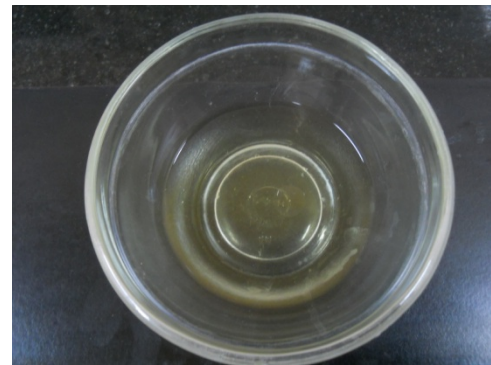
DAY 3 : 3 minutes

Shape : Coin



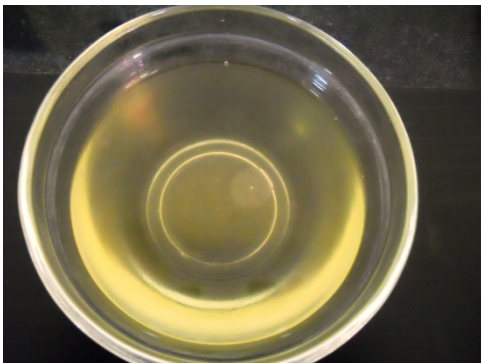
DAY 1 : 3 minutes

Shape : Disc



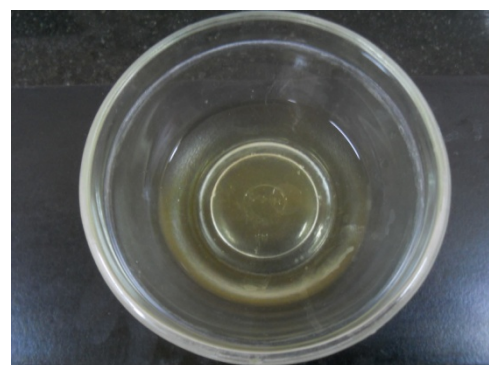
DAY 3 : 7 minutes

Shape : Coin



DAY 1 : 7 minutes

Shape : Disc



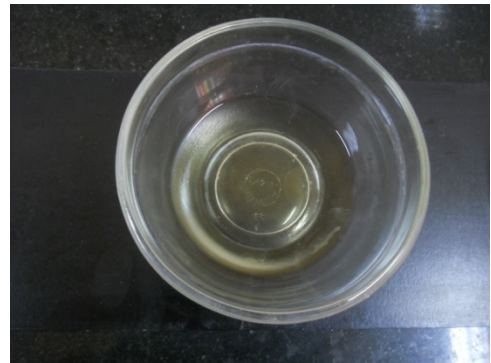
DAY 2 : 1 minute

Shape : Disc



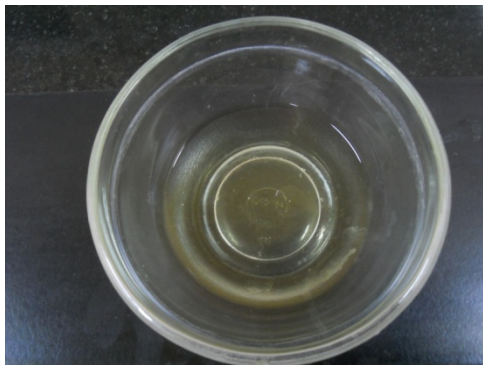
DAY 3 : 1 minute

Shape :Circular



DAY 2 : 3 minutes

Shape : Disc



DAY 3 : 3 minutes

Shape : Circular



DAY 2 : 7 minutes

Shape : Disc



DAY 3 : 7 minutes

Shape : Circular



DIFFERENT COLOUR OF THE URINE

COLOUR LESS URINE



STRAW COLOURED URINE



YELLOW COLOUR URINE



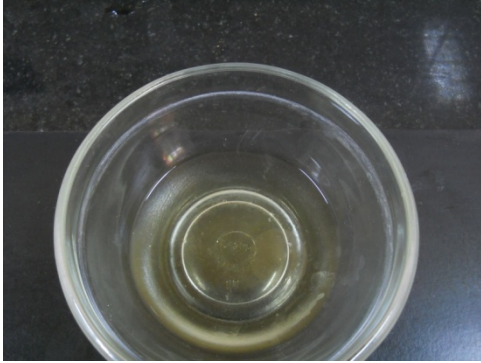
DARK YELLOW COLOUR URINE



21.OPD NO : B60353 Mr.Balakrishnan.S

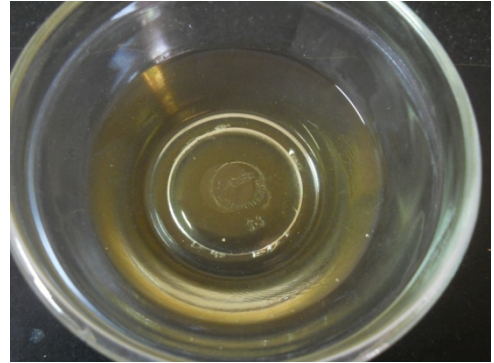
DAY 1 : 1 minute

Shape:Disc



DAY 2 : 1 minute

Shape:Disc



DAY 1 : 3 minutes

Shape: Coin



DAY 2 : 3 minutes

Shape :Disc



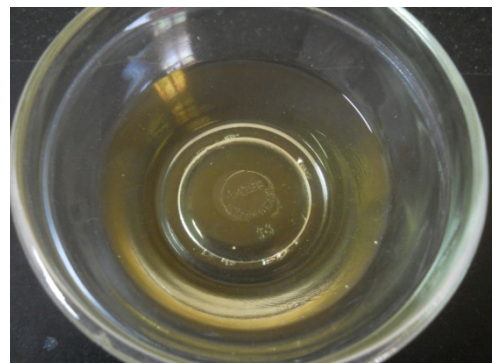
DAY 1 : 7 minutes

Shape : Coin



DAY 2 : 7 minutes

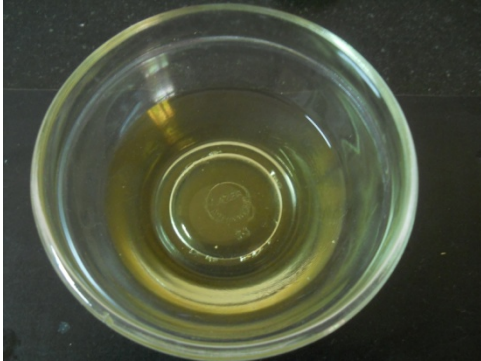
Shape : Disc



22.OPD NO: C64209/Mrs.R.Magalakshmi

DAY 3 : 1 minute

Shape :Coin



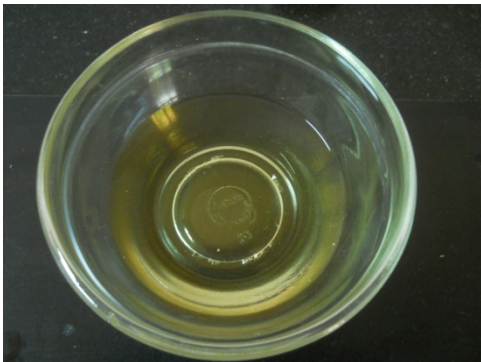
DAY 1 : 1 minute

Shape : Coin



DAY 3 :3 minutes

Shape :Coin



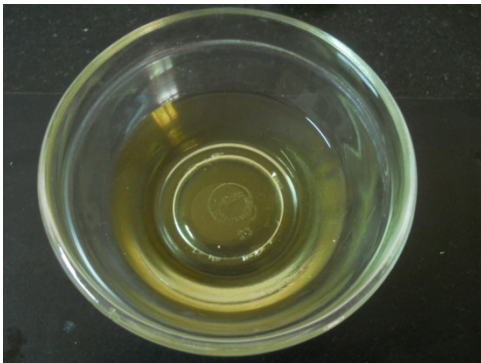
DAY 1 : 3 minutes

Shape : Coin



DAY 3 : 7 minutes

Shape :Coin



DAY 1 : 7 minutes

Shape : Coin



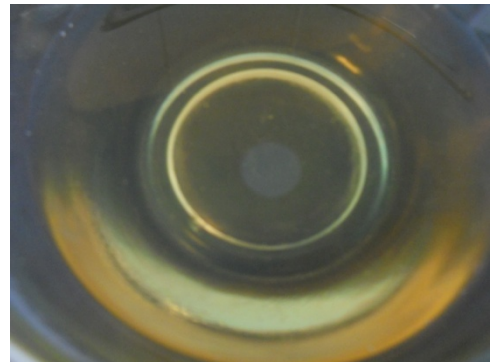
DAY 2 : 1 minute

Shape :Disc



DAY 3 : 1 minute

Shape : Disc



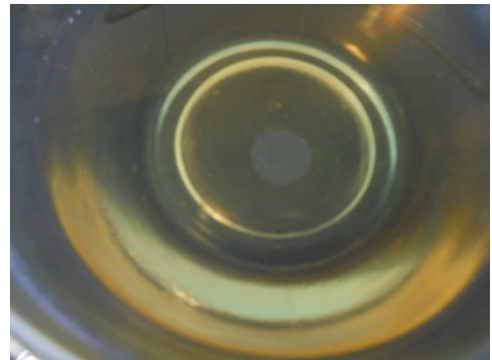
DAY 2 : 3 minutes

Shape :Disc



DAY 3 : 3 minutes

Shape : Disc



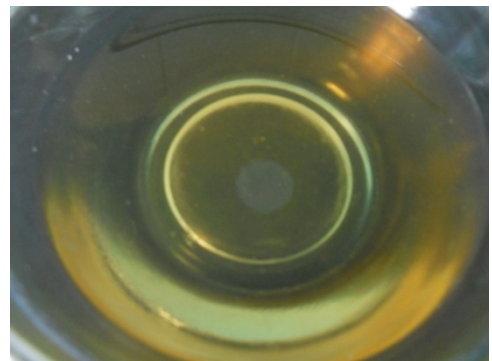
DAY 2 : 7 minutes

Shape : Disc



DAY 3 : 7 minutes

Shape : Disc



23.IPD NO :4121 /Mrs.R.Chandrika

DAY 1 : 1 minute

Shape : Coin



DAY 2 : 1 minute

Shape: Circular



DAY 1 : 3 minutes

Shape : Coin



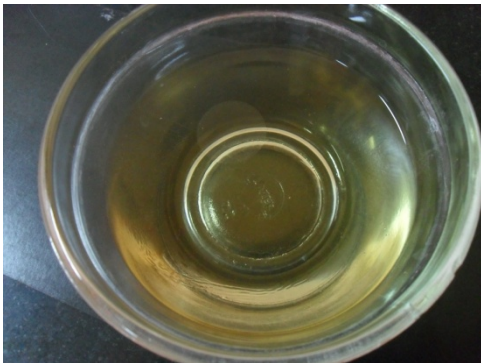
DAY 2 : 3 minutes

Shape : Circular



DAY 1 : 7 minutes

Shape : Coin



DAY 2 : 7 minutes

Shape : Circular



24.OPD NO : C79542/Mrs.V.Punitha

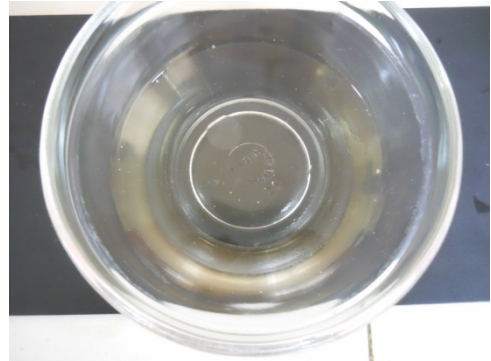
DAY 3 : 1 minute

Shape :Disc



DAY 1 : 1 minute

Shape : Disc



DAY 3 : 3 minutes

Shape :Disc



DAY 1 : 3 minutes

Shape : Disc



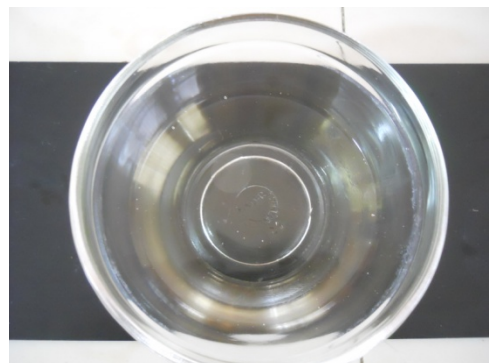
DAY 3 : 7 minutes

Shape :Disc



DAY 1 : 7 minutes

Shape : Disc



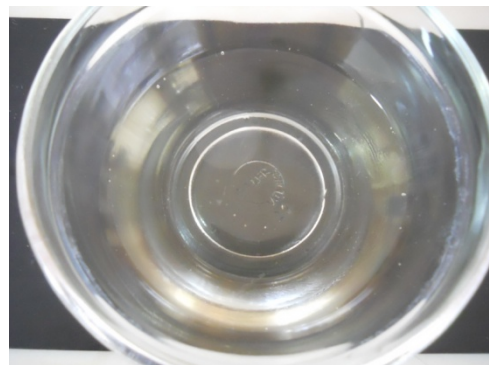
DAY 2 : 1 minute

Shape: Disc



DAY 3 : 1 minute

Shape : Coin



DAY 2 : 3 minutes

Shape :Disc



DAY 3 : 3 minutes

Shape : Coin



DAY 2 : 7 minutes

Shape :Disc



DAY 3 : 7 minutes

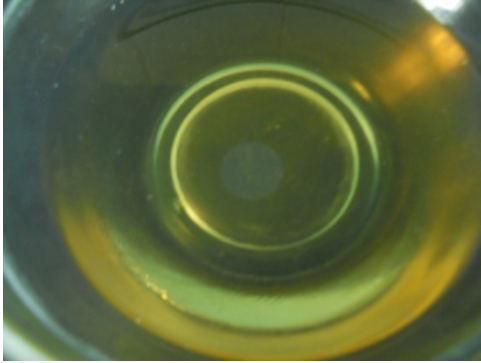
Shape : Coin



25.OPD NO: C97203/Mr.K.Prakash

DAY 1 : 1 minute

Shape :Disc



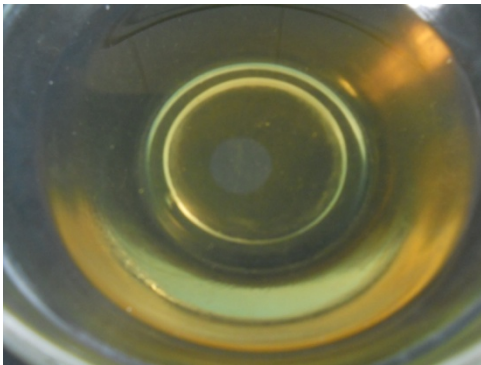
DAY 2 : 1 minute

Shape :Coin



DAY 1 : 3 minutes

Shape : Disc



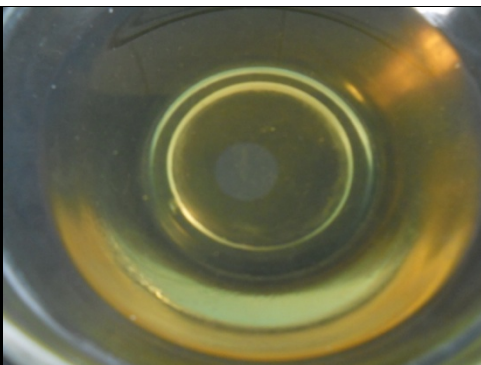
DAY 2 : 3 minutes

Shape :Coin



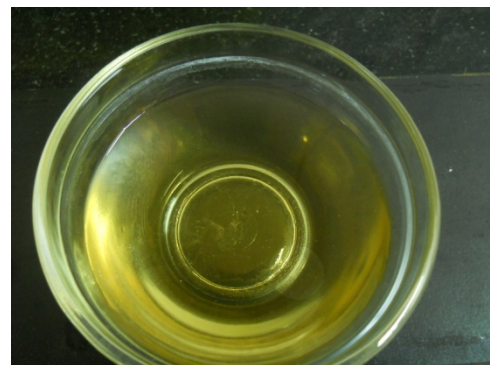
DAY 1 : 7 minutes

Shape : Disc



DAY 2 : 7 minutes

Shape : Coin



26.OPD NO:C82509 /Mrs.V.Vijaya

DAY 1 : 1 minute

Shape : Pearl



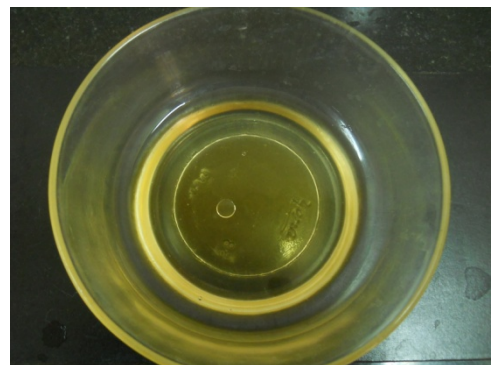
DAY 3 : 1 minute

Shape : Disc



DAY 1 : 3 minutes

Shape : Pearl



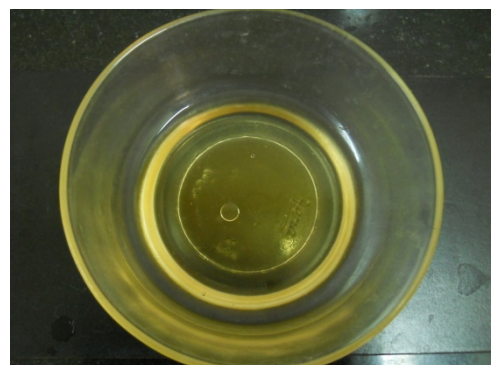
DAY 3 : 3 minutes

Shape : Disc



DAY 1 : 7 minutes

Shape : Pearl



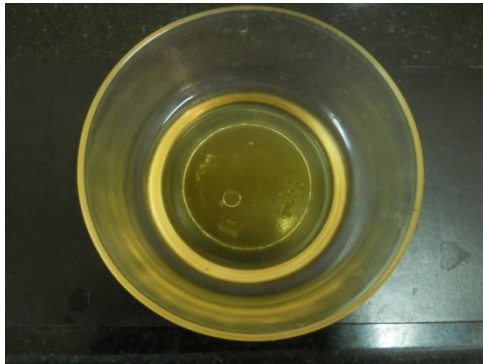
DAY 3 : 7 minutes

Shape : Disc



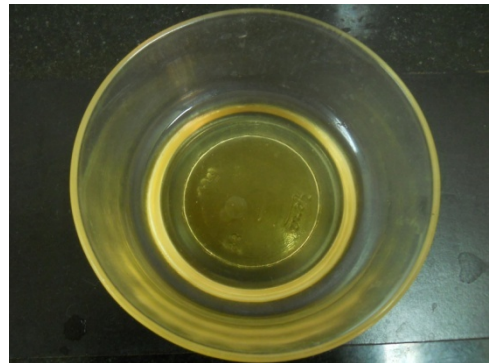
DAY 2 : 1 minute

Shape : Pearl



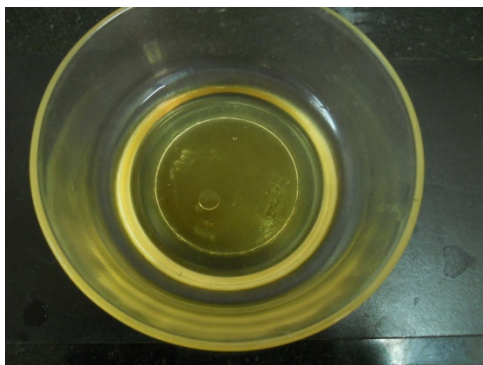
DAY 3 : 1 minute

Shape : Disc



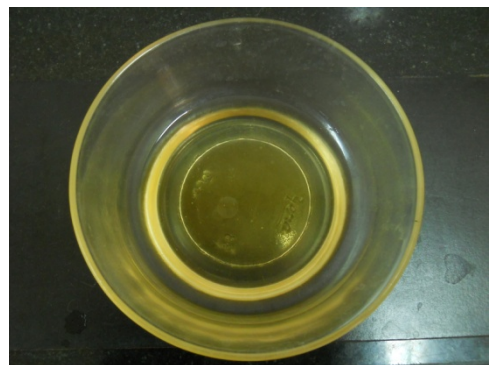
DAY 2 : 3 minutes

Shape : Pearl



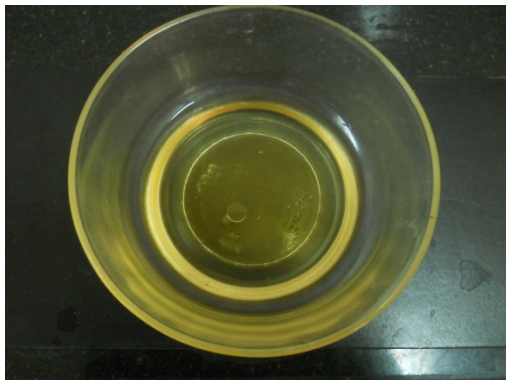
DAY 3 : 3 minutes

Shape : Disc



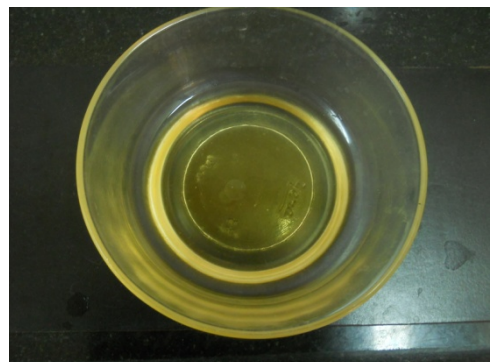
DAY 2 : 7 minutes

Shape : Pearl



DAY 3 : 7 minutes

Shape : Disc



27.OPD NO :C97496 /Mrs.D.Chithra

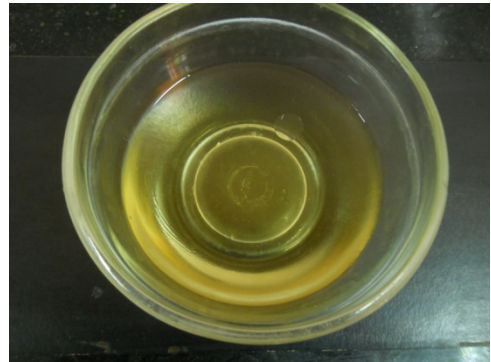
DAY 1 : 1 minute

Shape : Pearl



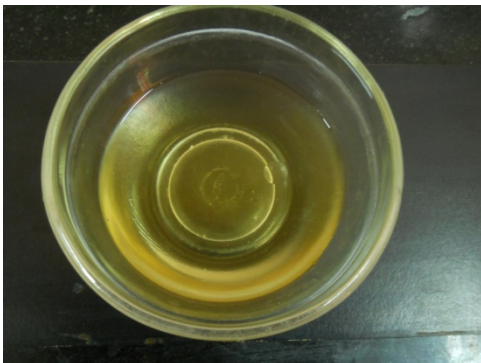
DAY 2 : 1 minute

Shape : Coin



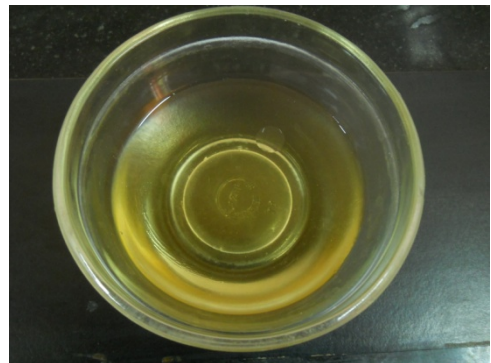
DAY 1 : 3 minutes

Shape : Pearl



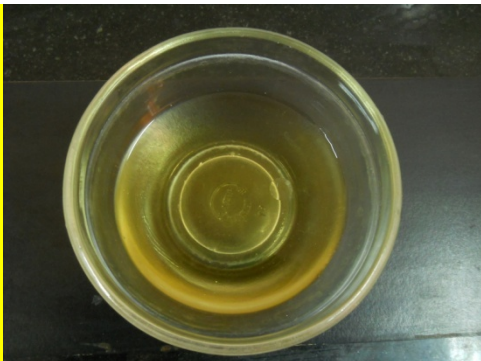
DAY 2 : 3 minutes

Shape : Coin



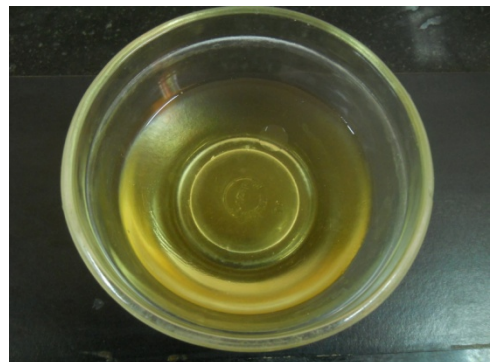
DAY 1 : 7 minutes

Shape : Pearl



DAY 2 : 7 minutes

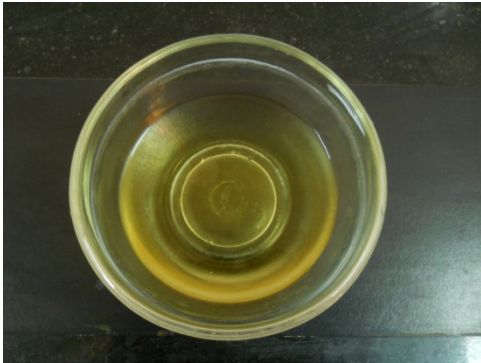
Shape : Coin



28.OPD NO: C75187/Mrs.M.Jeyanthi

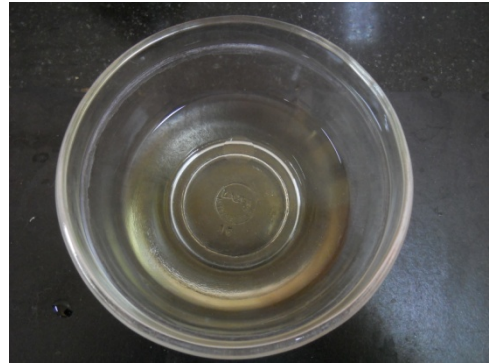
DAY 3 : 1 minute

Shape : Coin



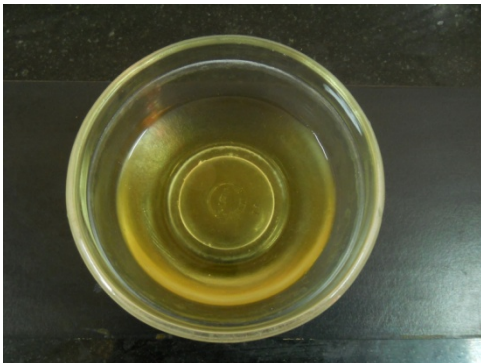
DAY 1 : 1 minute

Shape : Coin



DAY 3 : 3 minutes

Shape :Coin



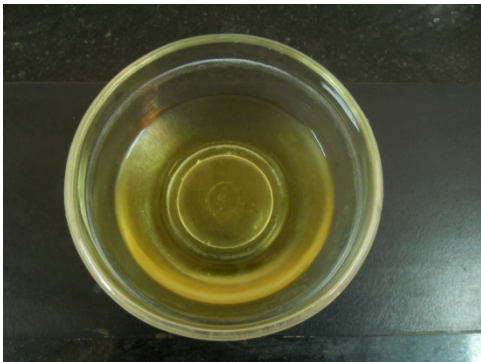
DAY 1 : 3 minutes

Shape : Coin



DAY 3 : 7 minutes

Shape :Coin



DAY 1: 7 minutes

Shape : Coin



DAY 2 : 1 minute

Shape : Coin



DAY 3 : 1 minute

Shape : Coin



DAY 2 : 3 minutes

Shape : Coin



DAY 3 : 3 minutes

Shape: Coin



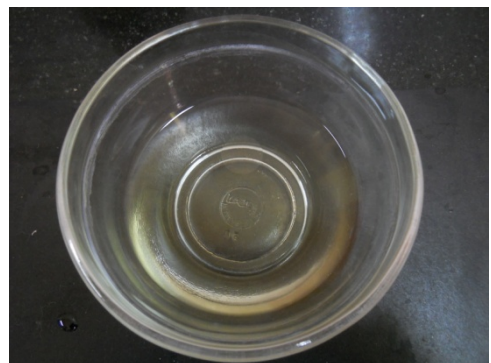
DAY 2 : 7 minutes

Shape : Coin



DAY 3 : 7 minutes

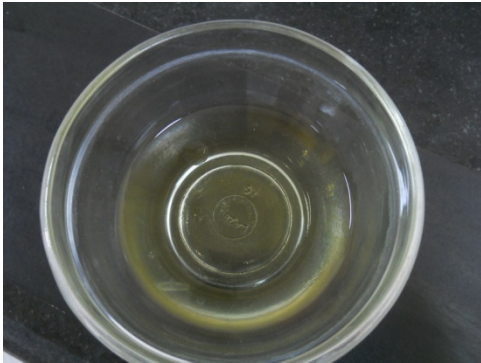
Shape : Coin



29.OPD NO: C98741/Mr.M.K.Moorthy

DAY 1 : 1 minute

Shape : Coin



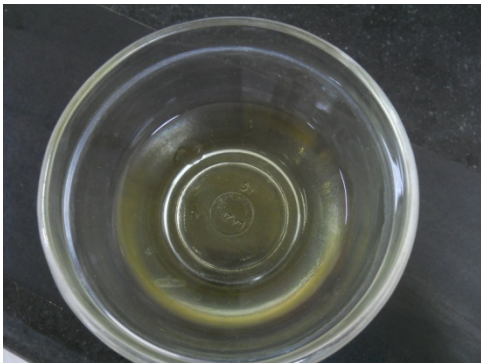
DAY 2 : 1 minute

Shape : Coin



DAY 1 : 3 minutes

Shape : Coin



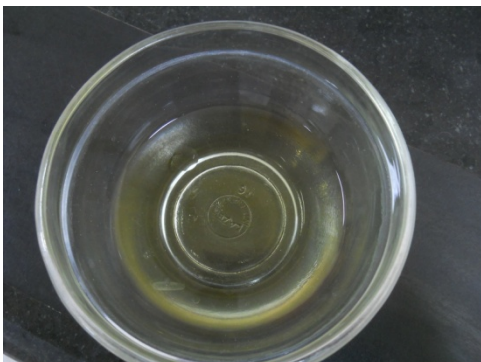
DAY 2 : 3 minutes

Shape : Coin



DAY 1: 7 minutes

Shape : Coin



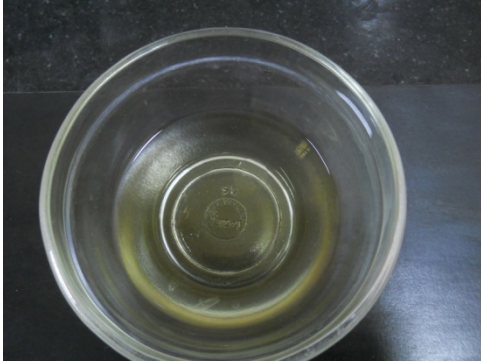
DAY 2 : 7 minutes

Shape : Coin



30.OPD NO: /Mrs.S.Thilagavathy

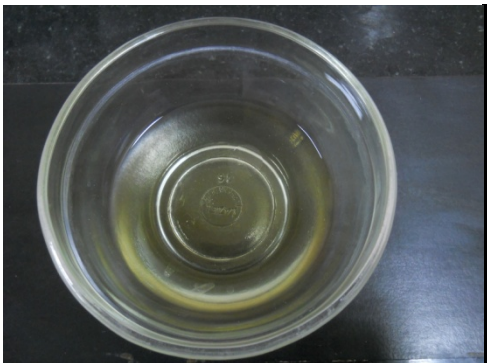
DAY 3 : 1 minute
Shape : Coin



DAY 1 : 1 minute
Shape : Coin



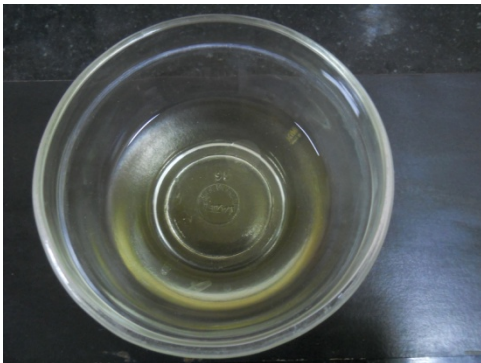
DAY 3 : 3 minutes
Shape : Coin



DAY 1 : 3 minutes
Shape : Coin



DAY 3 : 7 minutes
Shape : Coin

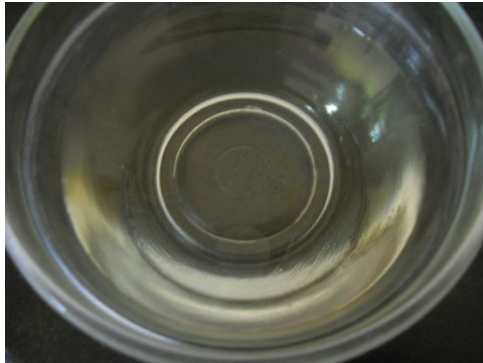


DAY 1: 7 minutes
Shape : Coin



DAY 2 : 1 minute

Shape : Coin



DAY 3 : 1 minute

Shape : Coin



DAY 2 : 3 minutes

Shape : Coin



DAY 3 : 3 minutes

Shape : Coin



DAY 2 : 7 minutes

Shape : Coin



DAY 3 : 7 minutes

Shape : Coin



DIFFERENT COLOUR OF THE URINE

COLOUR LESS URINE



STRAW COLOURED URINE



YELLOW COLOUR URINE



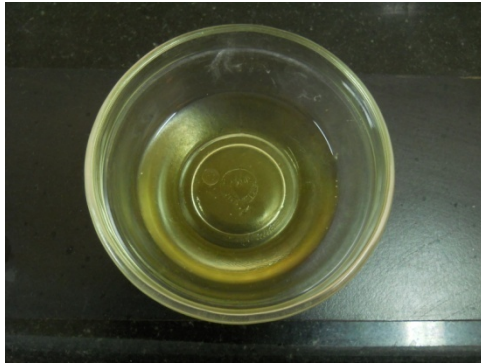
DARK YELLOW COLOUR URINE



31.OPD NO: C81982/Mrs.A.Rani

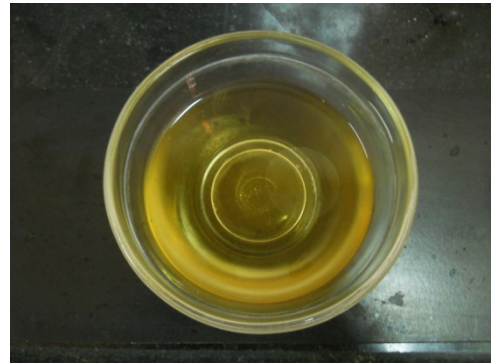
DAY 1 : 1 minute

Shape: Coin



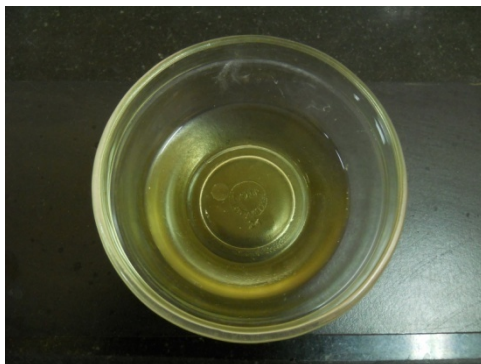
DAY 2 : 1 minute

Shape: Circular



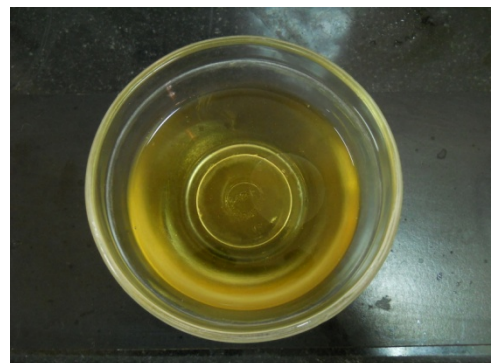
DAY 1 : 3 minutes

Shape: Coin



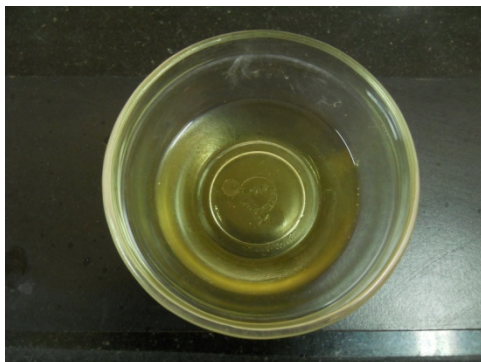
DAY 2 : 3 minutes

Shape :Circular



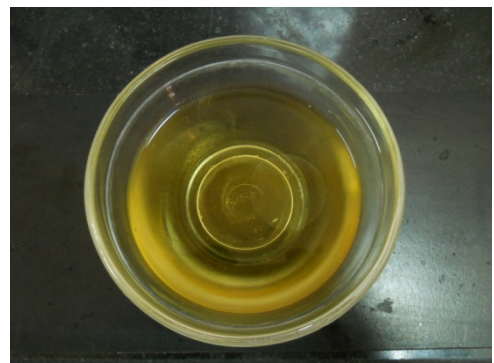
DAY 1 : 7 minutes

Shape : Coin



DAY 2 : 7 minutes

Shape : Circular



32.OPD NO: C97642/Mrs.H.M.Ayesha

DAY 3 : 1 minute

Shape : Coin



DAY 1 : 1 minute

Shape : Coin



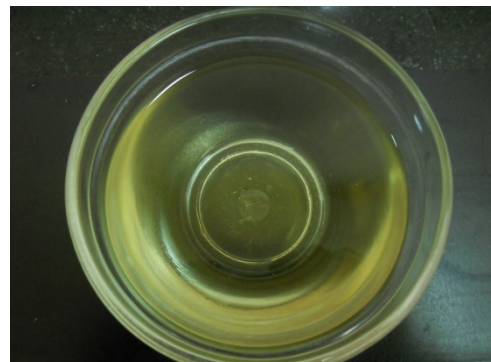
DAY 3 : 3 minutes

Shape : Coin



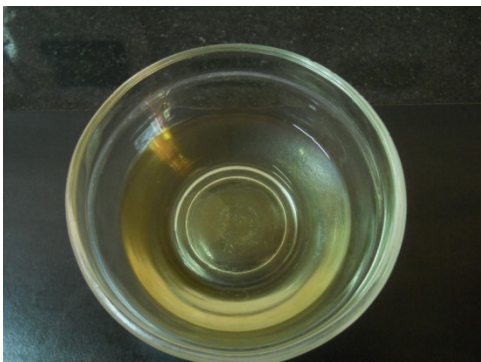
DAY 1 : 3 minutes

Shape : Coin



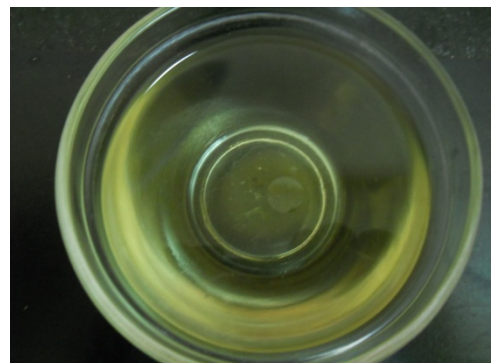
DAY 3 : 7 minutes

Shape : Coin



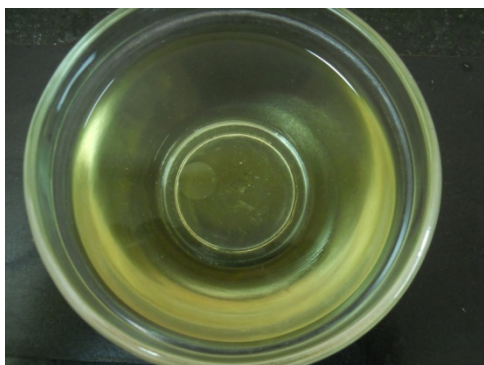
DAY 1 : 7 minutes

Shape : Coin



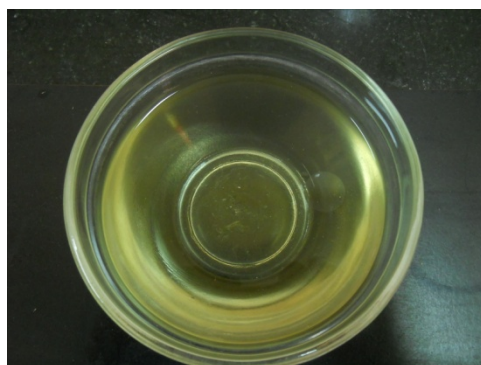
DAY 2 : 1 minute

Shape : Coin



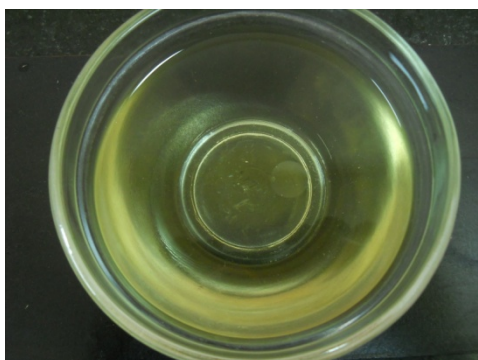
DAY 3 : 1 minute

Shape : Coin



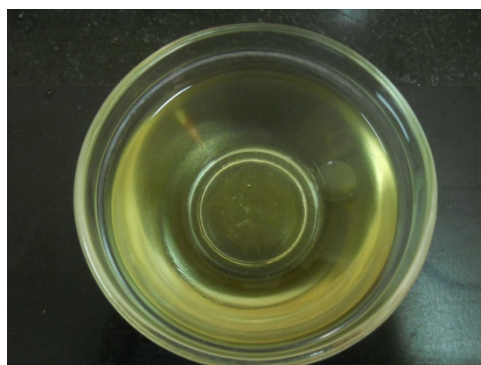
DAY 2 : 3 minutes

Shape : Coin



DAY 3 : 3 minutes

Shape : Coin



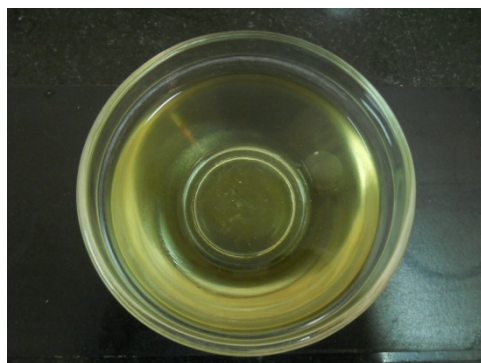
DAY 2 : 7 minutes

Shape : Coin



DAY 3 : 7 minutes

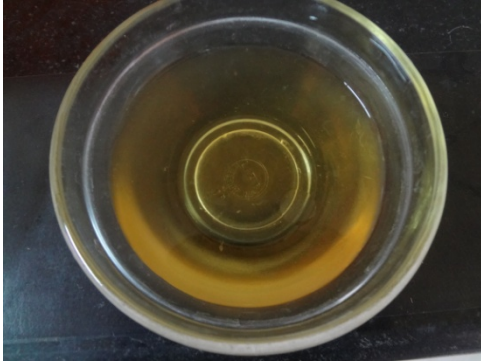
Shape : Coin



33.OPD NO : AL9663/Mrs.P.Eswari

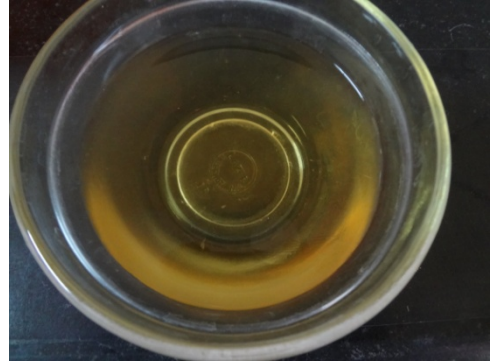
DAY 1 : 1 minute

Shape : Coin



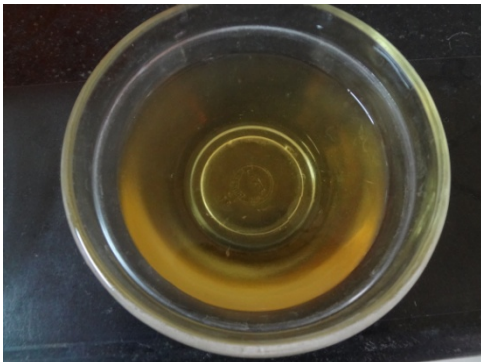
DAY 2 : 1 minute

Shape: Coin



DAY 1 : 3 minutes

Shape : Coin



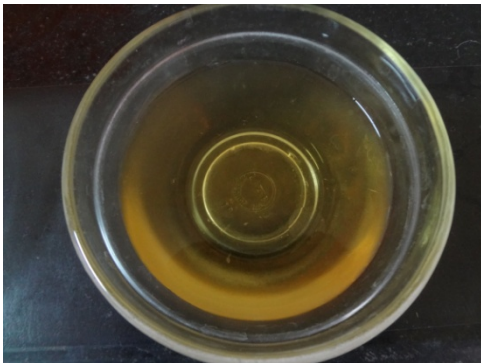
DAY 2 : 3 minutes

Shape : Coin



DAY 1 : 7 minutes

Shape : Coin



DAY 2 : 7 minutes

Shape : Coin



34.OPD NO : C99206/Miss.K.Nisha

DAY 3 : 1 minute

Shape : Coin



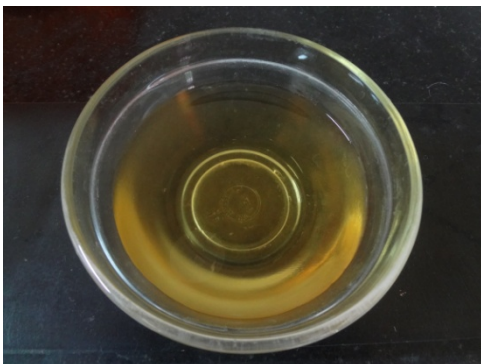
DAY 1 : 1 minute

Shape : Coin



DAY 3 : 3 minutes

Shape : Coin



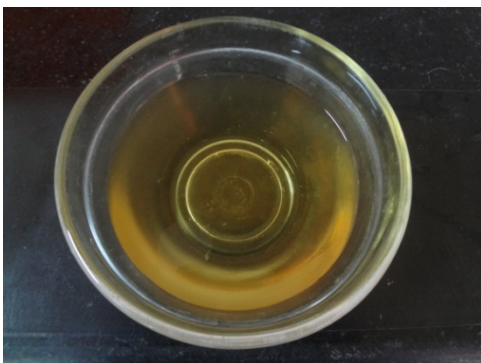
DAY 1 : 3 minutes

Shape : Coin



DAY 3 : 7 minutes

Shape : Coin



DAY 1 : 7 minutes

Shape : Coin



DAY 2 : 1 minute

Shape : Coin



DAY 3 : 1 minute

Shape : Coin



DAY 2 : 3 minutes

Shape : Coin



DAY 3 : 3 minutes

Shape : Coin



DAY 2 : 7 minutes

Shape : Coin



DAY 3 : 7 minutes

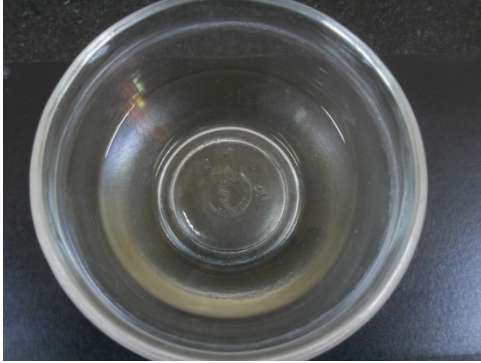
Shape : Coin



35.OPD NO:D2877 /Mrs.K. Amudha

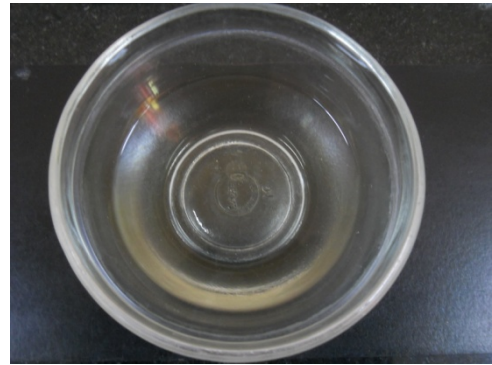
DAY 1 : 1 minute

Shape : Coin



DAY 2 : 1 minute

Shape : Coin



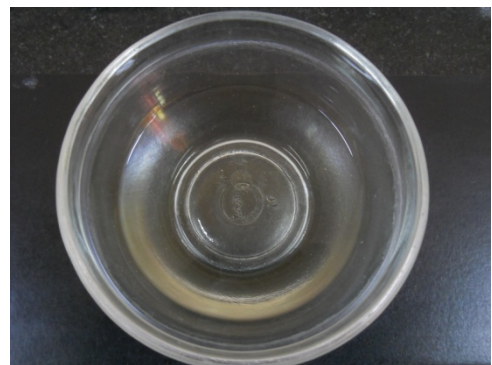
DAY 1 : 3 minutes

Shape : Coin



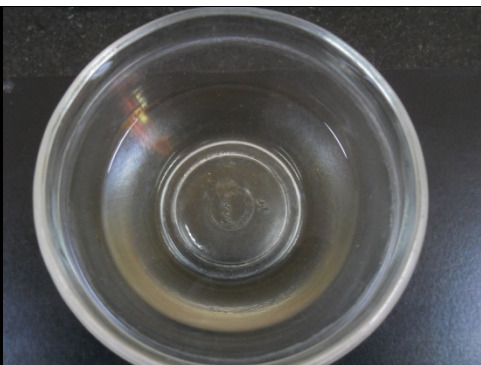
DAY 2 : 3 minutes

Shape : Coin



DAY 1 : 7 minutes

Shape : Coin



DAY 2 : 7 minutes

Shape : Coin



36.OPD NO:D2865/Mr.P.Sundar

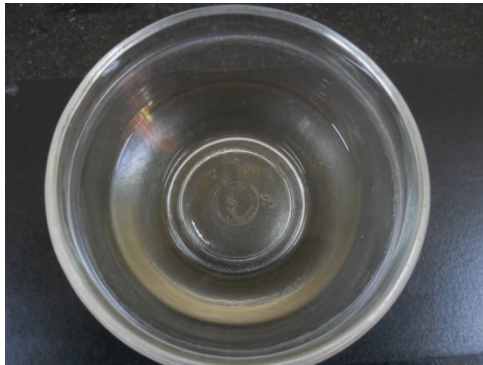
DAY 1 : 1 minute

Shape : Coin



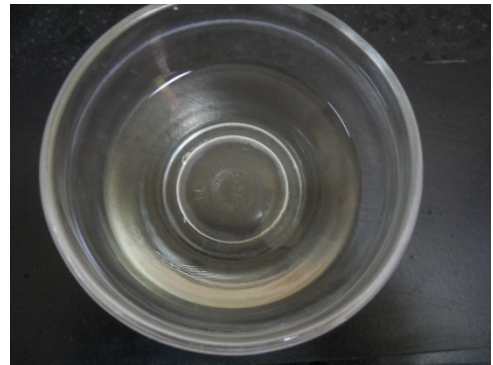
DAY 3 : 1 minute

Shape : Coin



DAY 1 : 3 minutes

Shape : Coin



DAY 3 : 3 minutes

Shape : Coin



DAY 1 : 7 minutes

Shape : Coin



DAY 3 : 7 minutes

Shape : Coin



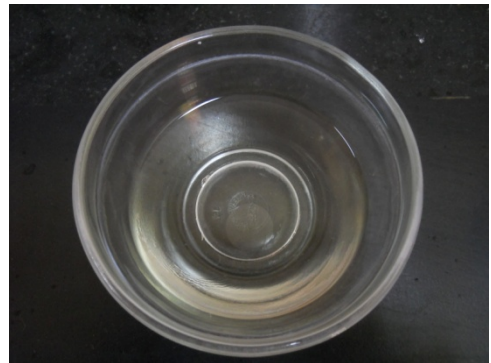
DAY 2 : 1 minute

Shape : Coin



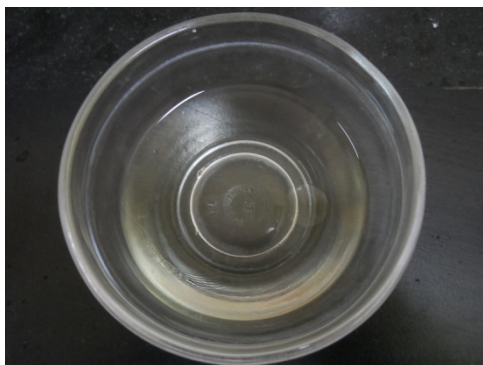
DAY 3 : 1 minute

Shape : Coin



DAY 2 : 3 minutes

Shape : Coin



DAY 3 : 3 minutes

Shape : Circular



DAY 2 : 7 minutes

Shape : Coin



DAY 3 : 7 minutes

Shape : Circular



37.OPD NO : C87895/Mrs.S.Vijayalakshmi

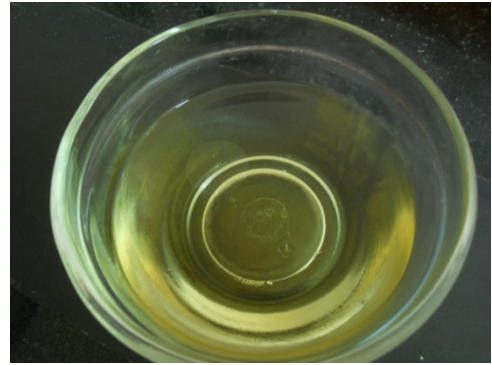
DAY 1 : 1 minute

Shape : Coin



DAY 2 : 1 minute

Shape : Coin



DAY 1 : 3 minutes

Shape : Coin



DAY 2 : 3 minutes

Shape : Coin



DAY 1 : 7 minutes

Shape : Coin



DAY 2 : 7 minutes

Shape : Coin



38.OPD NO: D5464 /Mr.E.Karthikeyan

DAY 3 : 1 minute

Shape : Coin



DAY 1 : 1 minute

Shape : Coin



DAY 3 : 3 minutes

Shape : Coin



DAY 1 : 3 minutes

Shape :Coin



DAY 3 : 7 minutes

Shape :Coin



DAY 1: 7 minutes

Shape : Coin



DAY 2 : 1 minute

Shape : Coin



DAY 3 : 1 minute

Shape : Coin



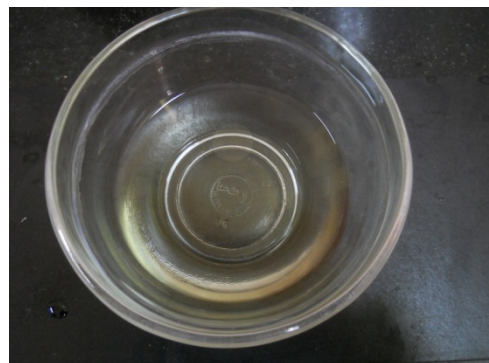
DAY 2 : 3 minutes

Shape : Coin



DAY 3 : 3 minutes

Shape: Coin



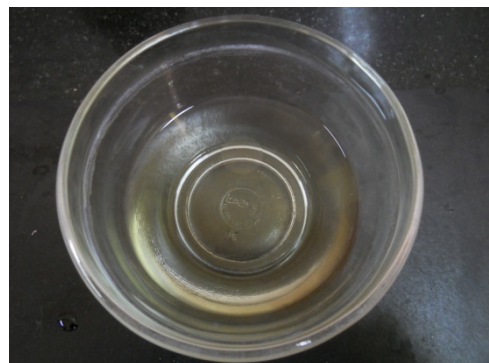
DAY 2 : 7 minutes

Shape :Coin



DAY 3 : 7 minutes

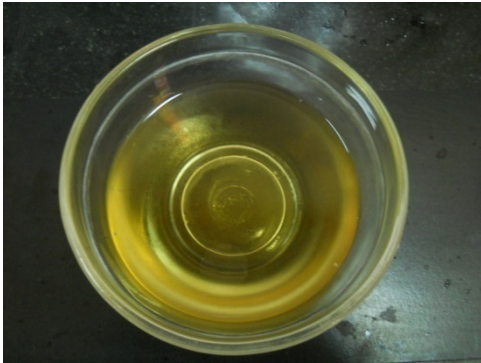
Shape : Coin



39.OPD NO: B80815/Mr.E.Karthik

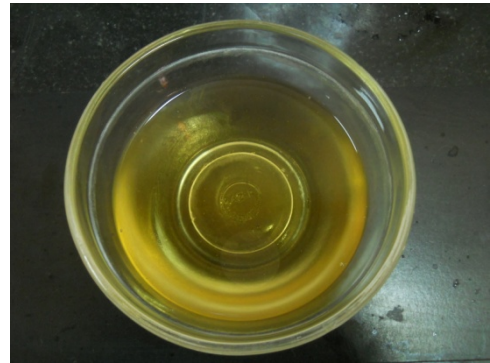
DAY 1 : 1 minute

Shape : Coin



DAY 2 : 1 minute

Shape : Coin



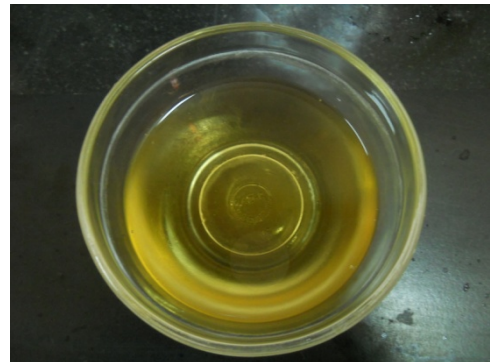
DAY 1 : 3 minutes

Shape : Coin



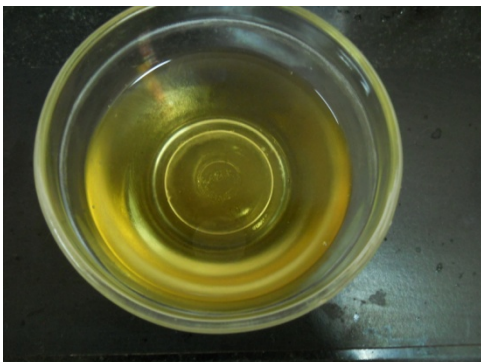
DAY 2 : 3 minutes

Shape : Coin



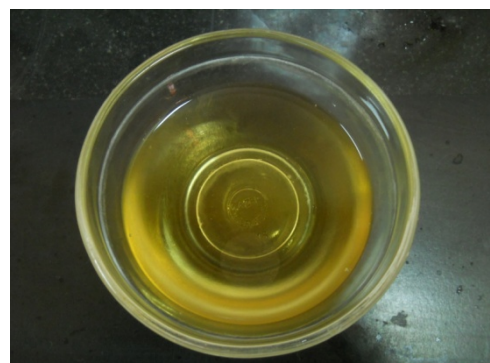
DAY 1: 7 minutes

Shape : Coin



DAY 2 : 7 minutes

Shape : Coin



40.OPD NO: /Mr.Gothandaraman

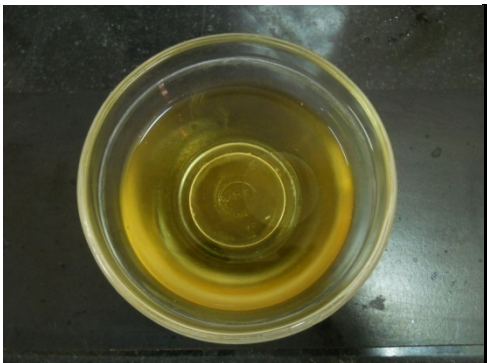
DAY 3 : 1 minute
Shape : Circular



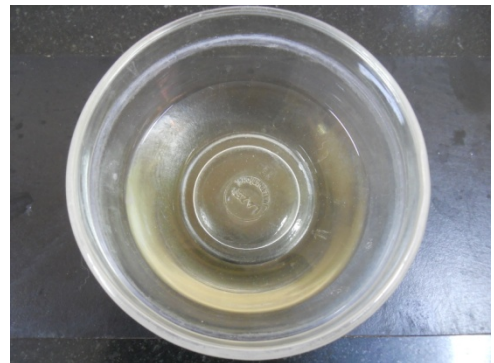
DAY 1 : 1 minute
Shape : Coin



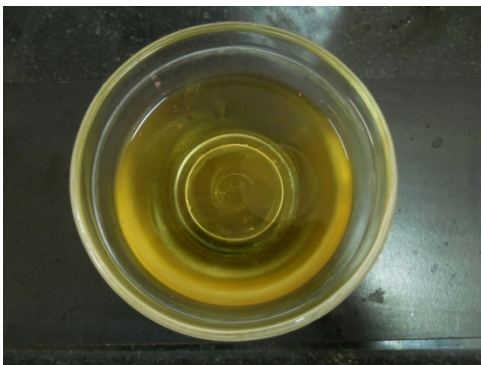
DAY 3 : 3 minutes
Shape : Circular



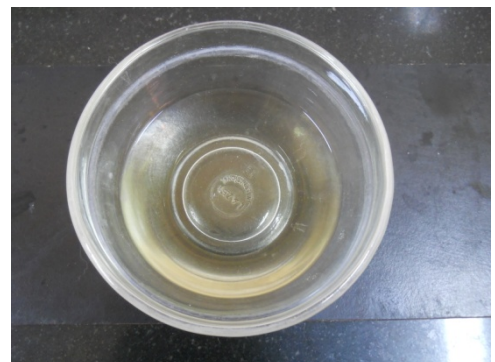
DAY 1 : 3 minutes
Shape : Coin



DAY 3 : 7 minutes
Shape : Circular

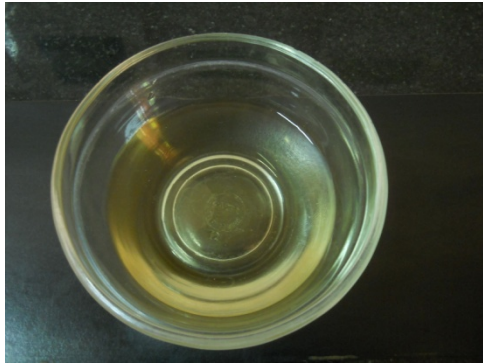


DAY 1 : 7 minutes
Shape : Coin



DAY 2 : 1 minute

Shape : Circular



DAY 3 : 1 minute

Shape :Oval



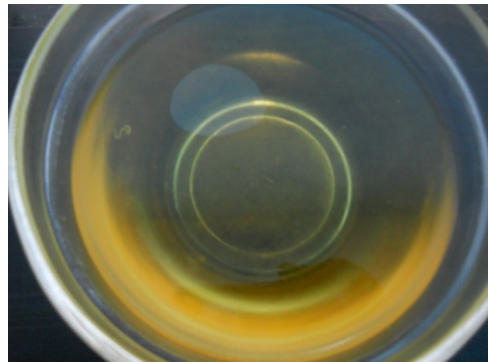
DAY 2 : 3 minutes

Shape : Circular



DAY 3 : 3 minutes

Shape :Oval



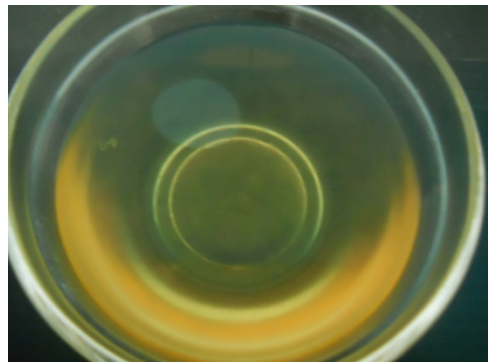
DAY 2 : 7 minutes

Shape : Circular



DAY 3 : 7 minutes

Shape : Oval



DIFFERENT COLOUR OF THE URINE

COLOUR LESS URINE



STRAW COLOURED URINE



YELLOW COLOUR URINE



DARK YELLOW COLOUR URINE



HEALTHY VOLUNTEERS...

neerkkuri neikkuri

- Manthara Kaasam

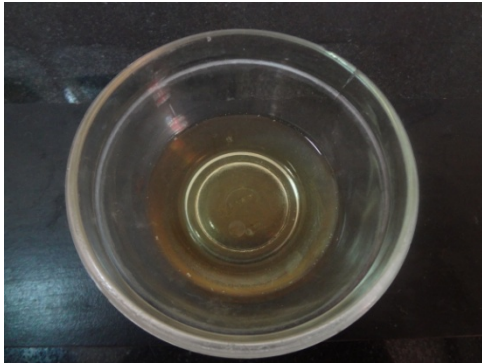


HEALTHY VOLUNTEERS

1.OPD NO: D19928 25/M

DAY 1 : 1 MINUTES

SHAPE: COIN



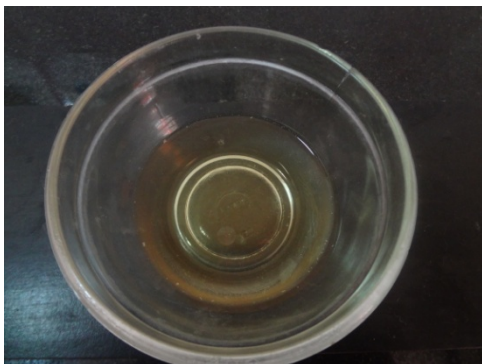
DAY 2 : 1 MINUTES

SHAPE: COIN



DAY 1 : 3 MINUTES

SHAPE: COIN



DAY 2 : 3 MINUTES

SHAPE : COIN



DAY 1 : 7 MINUTES

SHAPE : COIN



DAY 2 : 7 MINUTES

SHAPE : CIRCULAR



2.OPD NO: D19929 60/M

DAY 3 :1 MINUTES

SHAPE : JASMINE BUD



DAY 1 : 1 MINUTES

SHAPE : COIN



DAY 3 :3MINUTES

SHAPE : JASMINE BUD



DAY 1 :3 MINUTES

SHAPE : COIN



DAY 3 : 7MINUTES

SHAPE : LUTE



DAY 1 : 7 MINUTES

SHAPE : COIN



DAY 2 : 1 MINUTES

SHAPE : COIN



DAY 3 : 1 MINUTES

SHAPE : COIN



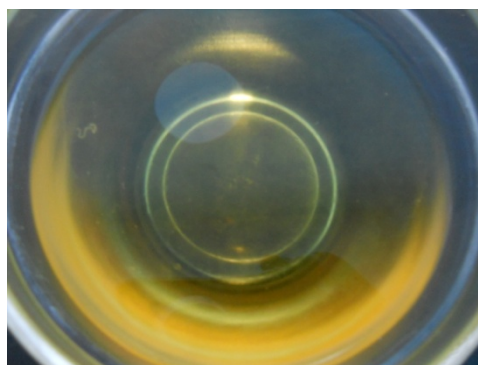
DAY 2 : 3 MINUTES

SHAPE : COIN



DAY 3 : 3 MINUTES

SHAPE : COIN



DAY 2 : 7 MINUTES

SHAPE : COIN



DAY 3 : 7 MINUTES

SHAPE : COIN



3.OPD NO : D30224 30/M

DAY 1 : 1 MINUTES

SHAPE : COIN



DAY 2 : 1 MINUTES

SHAPE: COIN



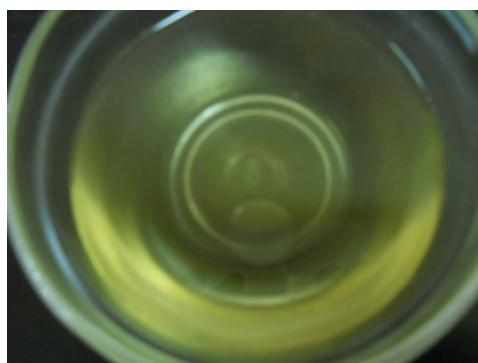
DAY 1 : 3 MINUTES

SHAPE : COIN



DAY 2 : 3 MINUTES

SHAPE : CIRCULAR



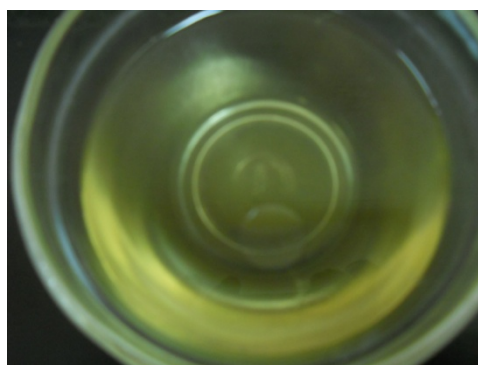
DAY 1 : 7 MINUTES

SHAPE : COIN



DAY 2 : 7 MINUTES

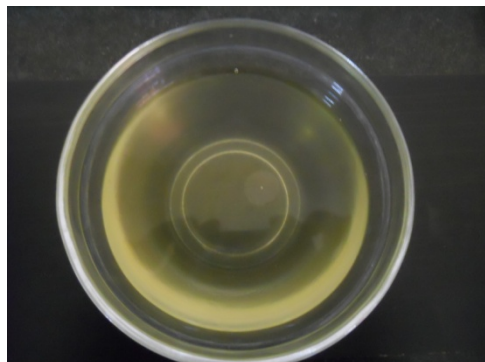
SHAPE : CIRCULAR



4.OPD NO : C 86813 27/M

DAY 3 : 1 MINUTE

SHAPE : COIN



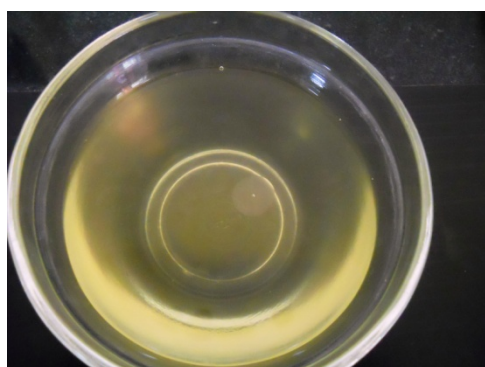
DAY 1 : 1 MINUTES

SHAPE : COIN



DAY 3 : 3 MINUTES

SHAPE : COIN



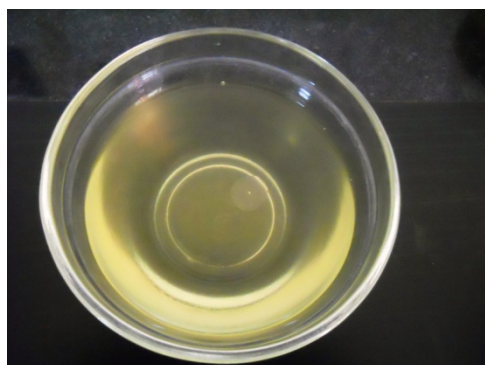
DAY 1 : 3 MINUTES

SHAPE : COIN



DAY 3 : 7MINUTES

SHAPE : COIN



DAY 1 : 7MINUTES

SHAPE : COIN



DAY 2:1 MINUTE

SHAPE : COIN



DAY 3:1 MINUTE

SHAPE : COIN



DAY 2 : 3MINUTES

SHAPE : COIN



DAY 3 :3 MINUTES

SHAPE : COIN



DAY 2 : 7 MINUTES

SHAPE : COIN



DAY 3 :7 MINUTES

SHAPE : COIN



5. OPD NO : C72223 37/M

DAY 1 : 1 MINUTES

SHAPE: COIN



DAY 2 : 1 MINUTES

SHAPE: COIN



DAY 1 : 3 MINUTES

SHAPE: COIN



DAY 2 : 3 MINUTES

SHAPE : COIN



DAY 1 : 7 MINUTES

SHAPE : COIN



DAY 2 : 7 MINUTES

SHAPE : CIRCULAR



6.O.P. NO: D15789 27/F

DAY 3 : 1 MINUTES

SHAPE : COIN



DAY 1 : 1 MINUTES

SHAPE : COIN



DAY 3 : 3 MINUTES

SHAPE : COIN



DAY 1 : 3 MINUTES

SHAPE : COIN



DAY 3 : 7 MINUTES

SHAPE : RING



DAY 1 : 7 MINUTES

SHAPE : COIN



DAY 2 : 1 MINUTES

SHAPE : COIN



DAY 3 : 1 MINUTES

SHAPE : COIN



DAY 2 : 3 MINUTES

SHAPE : COIN



DAY 3 : 3 MINUTES

SHAPE : COIN



DAY 2 : 7 MINUTES

SHAPE : COIN



DAY 3 : 7 MINUTES

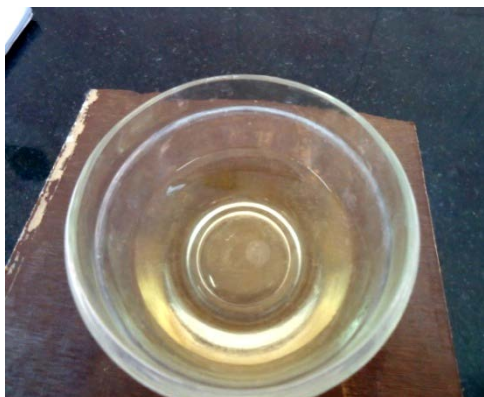
SHAPE : COIN



7. O.P.NO: D15797 24/ F

DAY 1 : 1 MINUTES

SHAPE : COIN



DAY 2 : 1 MINUTES

SHAPE : COIN



DAY 1 : 3 MINUTES

SHAPE : COIN



DAY2 : 3 MINUTES

SHAPE : COIN



DAY 1 : 7 MINUTES

SHAPE : COIN



DAY 2 : 7 MINUTES

SHAPE : COIN



8. O.P. NO: D13393 26/ F

DAY 3 : 1 MINUTES

SHAPE : COIN



DAY 1 : 1 MINUTES

SHAPE : COIN



DAY 3 : 3 MINUTES

SHAPE : COIN



DAY 1 : 3 MINUTES

SHAPE : COIN



DAY 3 : 7 MINUTES

SHAPE : JASMINE BUD



DAY 1 : 7 MINUTES

SHAPE : CIRCULAR



DAY 2 : 1 MINUTES

SHAPE : COIN



DAY 3 : 1 MINUTES

SHAPE : COIN



DAY 2 : 3 MINUTES

SHAPE : CIRCULAR



DAY 3 : 3 MINUTES

SHAPE : COIN



DAY 2 : 7 MINUTES

SHAPE : OVAL



DAY 3 : 7 MINUTES

SHAPE : CIRCULAR



9. O.P. NO: C33345 38/M

DAY 1 : 1

SHAPE : COIN



DAY 2 : 1 MINUTES

SHAPE : COIN



DAY 1 : 3 MINUTES

SHAPE : EGG



DAY 2 : 3 MINUTES

SHAPE : COIN



DAY 1: 7 MINUTES

SHAPE : CIRCULAR



DAY 2 : 7 MINUTES

SHAPE : CIRCULAR



10.OPD NO: C33793 37/M

DAY 3 : 1 MINUTES
SHAPE : COIN



DAY 1 :1 MINUTES
SHAPE : COIN



DAY 3 : 3 MINUTES
SHAPE : EGG



DAY 1 : 3 MINUTES
SHAPE : COIN



DAY 3 : 7
SHAPE : RING



DAY 1: 7 MINUTES
SHAPE : CIRCULAR



DAY 2 : 1 MINUTE

SHAPE : COIN



DAY 3 : 1 MINUTES

SHAPE : COIN



DAY 2 : 3 MINUTES

SHAPE : CIRCULAR



DAY 3 : 3 MINUTES

SHAPE : COIN



DAY 2 : 7 MINUTES

SHAPE : CIRCULAR



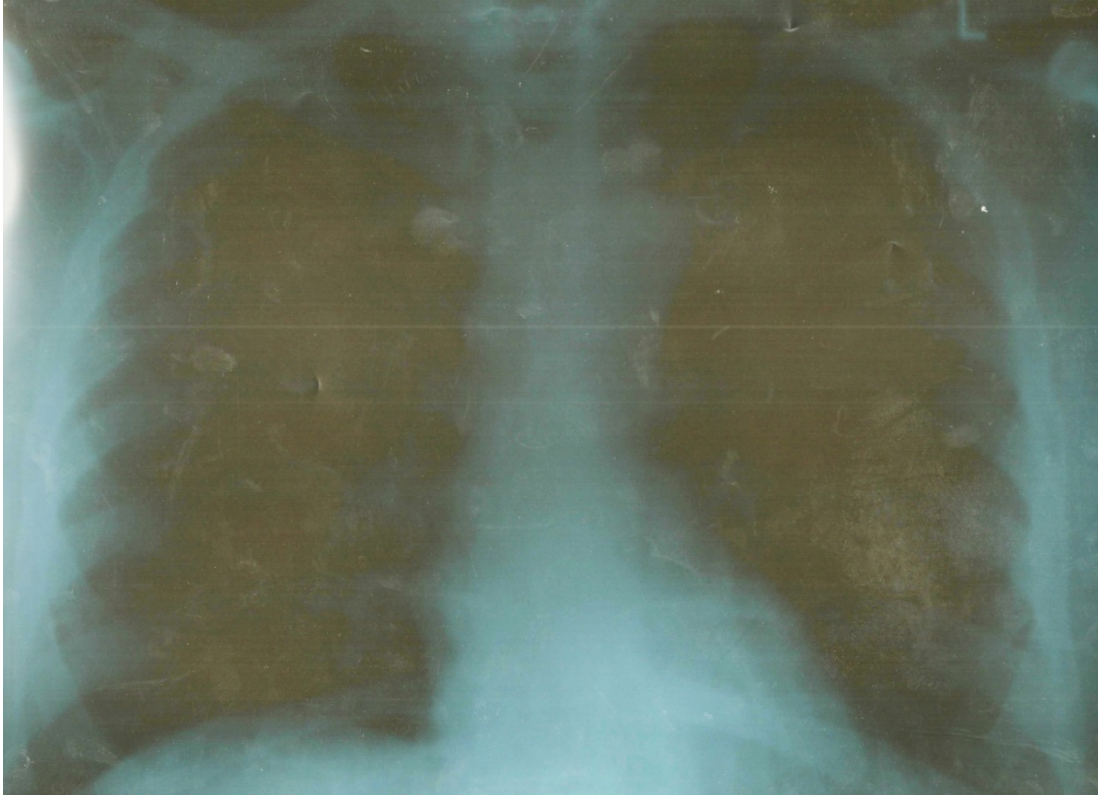
DAY 3 : 7 MINUTES

SHAPE : CIRCULAR



CHEST X- RAY PA VIEW

1.Mrs.M.JOTHI 35/F IP NO : 4036



Heart: Normal

Lungs: Trachea in midline

Both apices are free

No evidence of Pulmonary Tuberculosis

Mediastnum and both hilar regions are normal

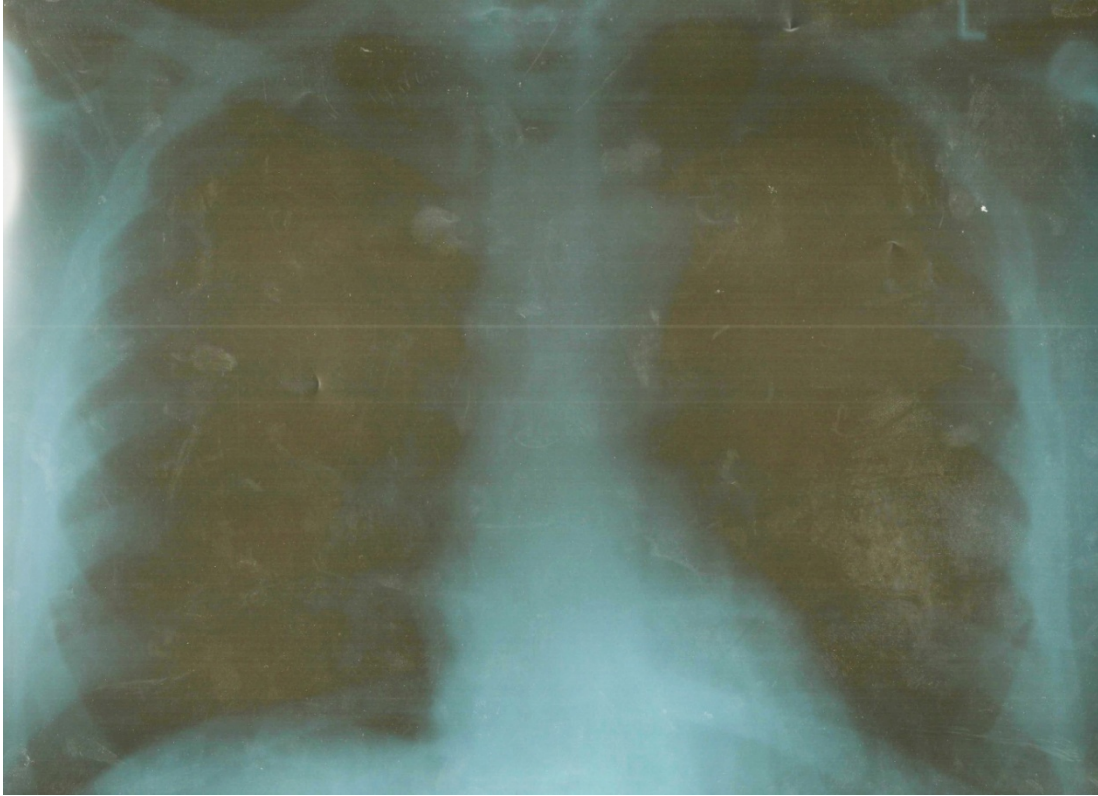
All angles are free

Lung fields are clear

Impression : Normal study.

CHEST X- RAY PA VIEW

2. Mrs. A. Eswari 42/F IP NO : 4038



Heart: Normal

Lungs: Trachea in midline

Both apices are free

No evidence of Pulmonary Tuberculosis

Mediastnum and both hilar regions are normal

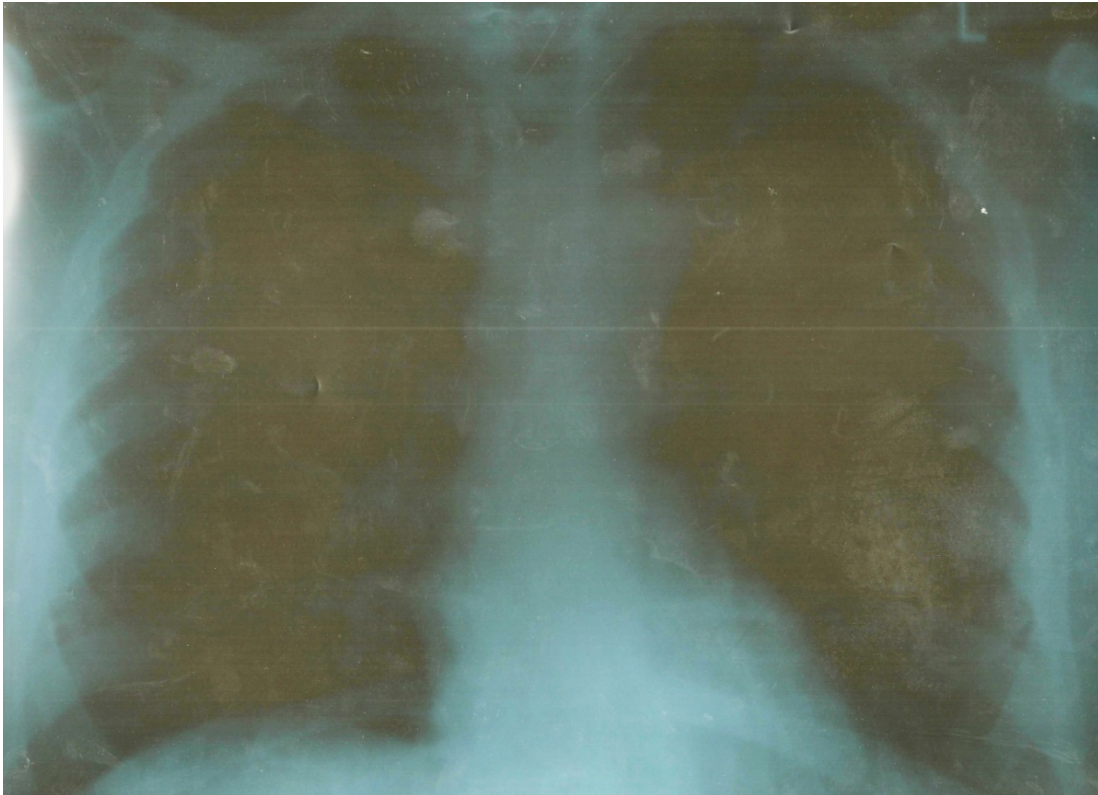
All angles are free

Lung fields are clear

Impression : Normal study.

CHEST X- RAY PA VIEW

3. Mrs. A. J. Roselet 45/F IP NO : 4040



Heart: Normal

Lungs: Trachea in midline

Both apices are free

No evidence of Pulmonary Tuberculosis

Mediastnum and both hilar regions are normal

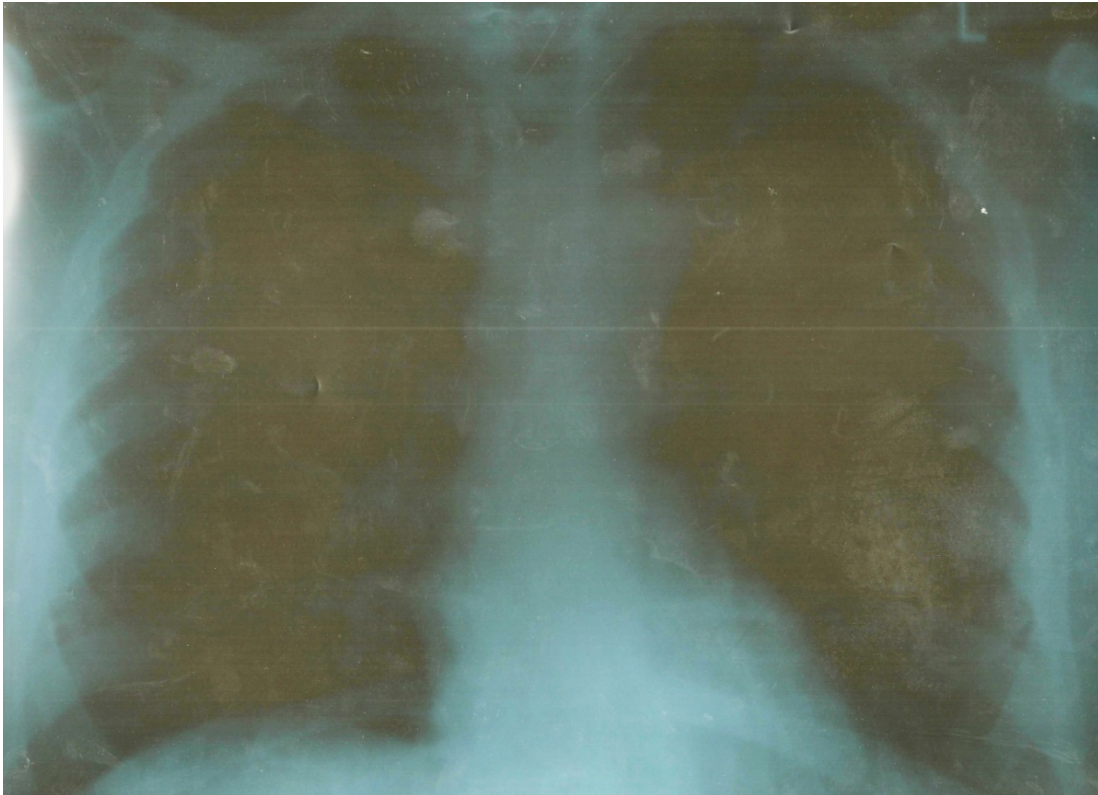
All angles are free

Lung fields are clear

Impression : Normal study.

CHEST X- RAY PA VIEW

4. Mr. M. Veerappan 60/M IP NO : 5026



Heart: Normal

Lungs: Trachea in midline

Both apices are free

No evidence of Pulmonary Tuberculosis

Mediastnum and both hilar regions are normal

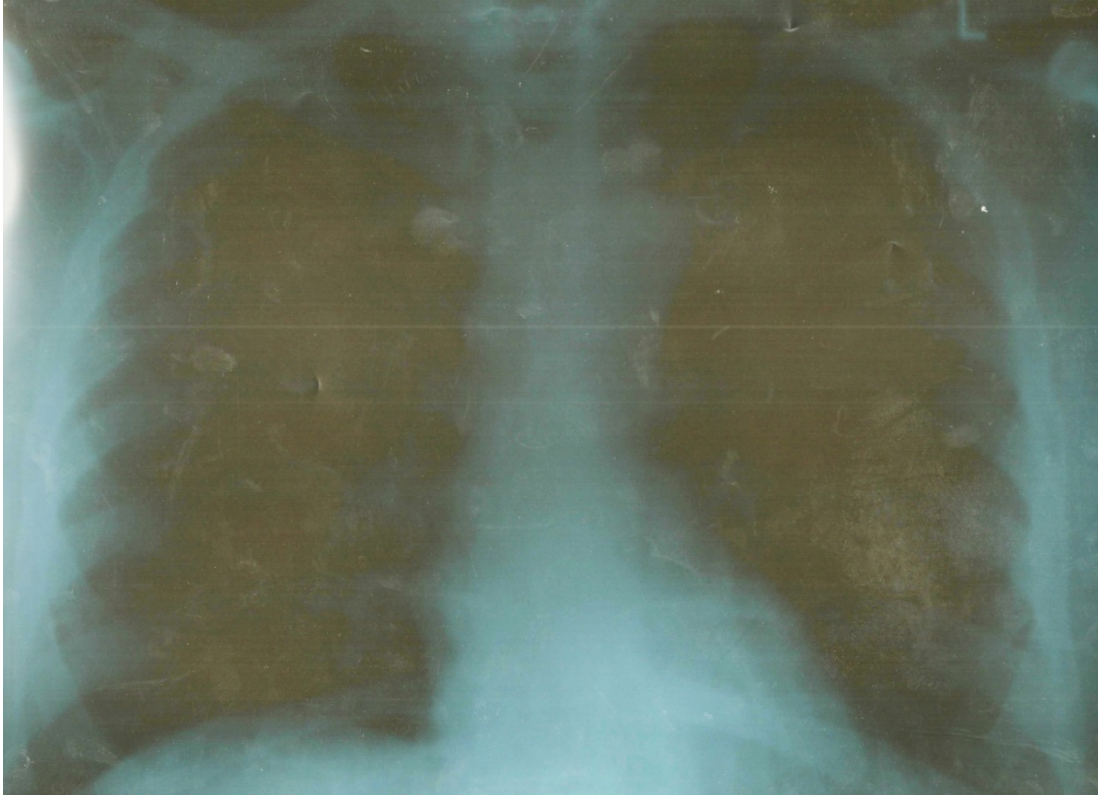
All angles are free

Lung fields are clear

Impression : Normal study.

CHEST X- RAY PA VIEW

5. Mr. N. Megan 56/M IP NO : 5027



Heart: Normal

Lungs: Trachea in midline

Both apices are free

No evidence of Pulmonary Tuberculosis

Mediastnum and both hilar regions are normal

All angles are free

Lung fields are clear

Impression : Normal study.

DISCUSSION...

neerukkuri neikkuri

- Manthara Kaasam



DISCUSSION

Neerkkuri and Neikkuri are exclusively Siddha methods of diagnostic urine examination propounded by Sage Theriyar. These are an efficient method in elucidating the prognosis of the given disease.

Out of the 80 cases screened, 40 diagnosed cases were selected from the outpatient department and 20 normal subjects were screened, 10 normal subjects will be selected from this study of Neerkkuri and Neikkuri urine analysis.

Among 40 cases, 30% of cases fell in the age group 41-50 years, 25% of cases fell in the age group 21-30 years, 25% of cases fell in the age group 31-40 years, 10% of cases fell in the age group 51-60 years and the remaining 10% of the cases fell in the age group 11-20 years.

Among 40 cases, 57.5% of cases were females and 42.5% were males.

Among 40 cases, 50% of cases fell in Vatha kaalam ie 0-33yrs, 50% of cases fell in Pitha kaalam 34-66 yrs .

Among 40 cases, 45% of cases had the naadinadai of Vathakabam, 30% of cases had Pitha kabam, 27.5% cases had Kabavatham, 22.5% of cases had Kaba pitham. In most of the cases had Vathakaba naadi. Manthaara kaasam disease is said to be associated with Vathakaba Naadi.

Among 40 cases, the colour of the urine were of 50% straw colour urine, 30% Pale yellow colour urine and 20% colourless urine .. In most of the cases, the colour of the urine observed were of straw colour.

Among 40 cases, the odour of the urine 62.5% had ammonical odour, 32.5% aromatic odour, and remaining 5% putrid odour.

Among 40 cases the froth of the urine is absent in 87.50% and remaining 12.50% of urine had froth.

Among 40 cases 2.5% of cases passed 500ml -1 lit of urine per day, 97.5% of cases passed 1.1-1.5 lit per day.

When more solutes are mixed in the urine, the Specific gravity tends to increase and the tension is likely to decrease. When the urine becomes more diluted, the Specific gravity decreases and surface tension tends to increase.

Among 40 cases, the specific gravity of the urine 50% had Specific gravity between 1.016-1.020, 22.5% had Specific gravity between 1.011-1.015, 15% had Specific gravity between 1.021-1.025 and 12.5% had Specific gravity between 1.003-1.010 .

Among 40 cases , 92.5% of cases had P^H between 5.1-6, 7.5% of cases had P^H between 6.1-7.

In day 1

In most of the cases, the shape of the Neikkuri observed in three minutes, seven minutes and ten minutes were of coin shape.

In day 2

In most of the cases, the shape of the Neikkuri observed in three minutes, seven minutes and ten minutes were of circular shape.

In day 3

In most of the cases, the shape of the Neikkuri observed in three minutes, seven minutes and ten minutes were of coin and pearl shapes.

The reason for the difference in the Neikkuri patterns of a given patient on three consecutive days could be dietary variations. Sage theran mentioned about various patterns of Neikkuri formation in his treatise. In that pearl shaped patterns are said to be associated with the Kaba humour in the urine.

CONCLUSION...

neerkkuri neikkuri

- Manthaara Kaasam



CONCLUSION

In Neerkkuri, colour, odour, froth, specific gravity, volume and pH were observed. The urine was mostly straw colour and aromatic odour. The froth was mostly absent and the specific gravity was mostly ranged from 1.003-1.010. The volume of urine passed per day was mostly 1-1.5 lit per day. The pH was mostly ranged between 5.1 and 6.

The reason for the difference in the Neikkuri patterns of a given patient on three consecutive days could be dietary variations. In most of the cases the dissemination dynamics of oil drop observed were of slow spreading nature. It indicates good prognosis.

If there is kapham in urine, the spread of the instilled oil drop will be slow. As the spread of oil is limited, the oil forms a pearl like appearance which can be observed in Neikuri. So, the pearl formation can be predominantly presumed to be because of kapham in the urine. More concentrated the pearl formation, higher the kapham in urine.

The Neikuri pattern observed for members in green zone, yellow zone and red zone were coin shape, circular shape and pearl shape respectively. In other words, from the Neikuri pattern, the zone of BA can be identified.

From the above study it is clearly evident that there was no variation of neikkuri shapes observed on the three consecutive days.

This study the author conclude that the Neikuri in Manthaara kaasam can be a good diagnostic tool for differentiating the zones of Bronchial asthma.

This study may throw new lights to standardize the Neerkkuri and Neikkuri and provide a lead to carry out further researches by the upcoming generation.

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neerkkuri neikkuri

- Manthara Kaasam



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ANNEXURE...

neerkkuri neikkuri

- Manthara Kaasam



ANNEXURE

Form –I	Screening and selection Proforma
Form –IA	History Proforma on enrollment
Form II	Clinical Assessment on enrollment
Form –III	Laboratory investigations on enrollment, during the study
Form –IV	Consent form (Vernacular and English versions)
Form -IV- A	Patient Information Sheet (Vernacular and English versions)

ANNEXURE-I

NATIONAL INSTITUTE OF SIDDHA, CHENNAI – 47.

DEPARTMENT OF NOI NAADAL

A STUDY ON NEERKKURI NEIKKURI DIAGNOSTIC METHODOLOGY IN
MANTHARA KAASAM/BRONCHIAL ASTHMA”

FORM I

SCREENING AND SELECTION PROFORMA

1. O.P.No _____ 2. I.P No _____ 3. Bed No: _____ 4. S.No: _____
5. Name: _____ 6. Age (years): 7. Gender: M ☐ F ☐
8. Occupation: _____ 9. Income: _____
10. Address: _____

11. Contact Nos: _____
12. E-mail : _____

INCLUSION CRITERIA

YES

NO

- Age: 18- 60 years ☐ ☐
- Difficulty in breathing ☐ ☐
- Wheezing ☐ ☐
- Cough without expectoration ☐ ☐
- Increased perspiration ☐ ☐
- Patient willing for blood , urine and sputum tests ☐ ☐

EXCLUSION CRITERIA:**YES****NO**

- Lung carcinoma
- Tuberculosis
- Major systemic illness
- Vulnerable group

☐☐☐☐☐☐☐☐**Date :****Signature of Lecturer:****Signature of Student**

ANNEXURE-II

NATIONAL INSTITUTE OF SIDDHA, CHENNAI – 47.

DEPARTMENT OF NOI NAADAL

A STUDY ON NEERKURI NEIKURI DIAGNOSTIC METHODOLOGY IN
MANTHARA KAASAM/ BRONCHIAL ASTHMA”

FORM I-A HISTORY PROFORMA

1. Sl.No of the case: _____

2. Name: _____ Height: ____cms Weight: ____Kg BMI:____

3. Age (years): _____ DOB

--	--

--	--

--	--	--	--

D D M M Y E A R

4.Educational Status:

1)Illiterate ☐ 2)Literate ☐ 3)Student ☐ 4)Graduate/Postgraduate ☐

5.Nature of work:

1) Sedentary work ☐
2) Field work with physical labour ☐
3) Field work Executive ☐

6. Complaints and Duration:

7. History of present illness:

8. History of Past illness:

	1. Yes	2. No
Systemic hypertension	<input type="checkbox"/>	<input type="checkbox"/>
Ischemic heart disease	<input type="checkbox"/>	<input type="checkbox"/>
Dyslipidaemia	<input type="checkbox"/>	<input type="checkbox"/>
Jaundice	<input type="checkbox"/>	<input type="checkbox"/>
Bronchial asthma	<input type="checkbox"/>	<input type="checkbox"/>
Any drug allergy	<input type="checkbox"/>	<input type="checkbox"/>
Any surgeries	<input type="checkbox"/>	<input type="checkbox"/>
Any major illnesses	<input type="checkbox"/>	<input type="checkbox"/>

9. Habits :

	1. Yes	2. No
Smoker	<input type="checkbox"/>	<input type="checkbox"/>
Alcoholic	<input type="checkbox"/>	<input type="checkbox"/>
Drug Addiction	<input type="checkbox"/>	<input type="checkbox"/>
Betel nut chewer:	<input type="checkbox"/>	<input type="checkbox"/>
Tea	<input type="checkbox"/>	<input type="checkbox"/>
Coffee	<input type="checkbox"/>	<input type="checkbox"/>
Milk	<input type="checkbox"/>	<input type="checkbox"/>
Type of diet	V <input type="checkbox"/> NV <input type="checkbox"/> M <input type="checkbox"/>	

10. Personal history:

Marital status: Married ☐ Unmarried ☐

No. of children: Male: _____ Female: _____

11. Family history:

History of diabetes mellitus	Yes	No
Father	<input type="checkbox"/>	<input type="checkbox"/>
Mother	<input type="checkbox"/>	<input type="checkbox"/>

Others:

6. Menstrual & Obstetric history:

Age at menarche _____ years

Gravidity ☐ Parity ☐

Duration of the menstrual cycle

Constancy of cycle duration: 1.Regular ☐ 2.Irregular ☐

7. GENERAL ETIOLOGY FOR MANTHARA KAASAM:

	YES	NO
Increased exposure to cool air	<input type="checkbox"/>	<input type="checkbox"/>
Increased roaming in sunlight	<input type="checkbox"/>	<input type="checkbox"/>
Increased intake of hot and cold foods	<input type="checkbox"/>	<input type="checkbox"/>
Increased speech and singing	<input type="checkbox"/>	<input type="checkbox"/>
Inhaling dust, fumes, gases, pungent smell	<input type="checkbox"/>	<input type="checkbox"/>
Breaks in the respiratory passages	<input type="checkbox"/>	<input type="checkbox"/>
Sleeping in the mist	<input type="checkbox"/>	<input type="checkbox"/>

ANNEXURE-III

NATIONAL INSTITUTE OF SIDDHA, CHENNAI – 47

DEPARTMENT OF NOI NAADAL

**A STUDY ON NEERKURI NEIKURI DIAGNOSTIC METHODOLOGY IN
MANTHARA KAASAM/ BRONCHIAL ASTHMA”**

FORM II **CLINICAL ASSESSMENT**

1. Serial No: _____

2. Name: _____

3. Date of birth:

D	D

M	M

Y	E	A	R

4. Age: _____ years

5. Date: _____

GENERAL EXAMINATION:

1. Height : _____ cms. BMI _____ (Weight Kg/ Height m²)

2. Weight (kg) :

3. Temperature (°F) :

4. Pulse rate :

5. Heart rate :

6. Respiratory rate :

7. Blood pressure :

8. Pallor :

9. Jaundice :

10. Cyanosis :

11. Lymphadenopathy :

12. Pedal edema :

13. Clubbing :

14. Jugular vein pulsation :

VITAL ORGANS EXAMINATION

	1. Normal	2. Affected
1. Heart	<input type="checkbox"/>	<input type="checkbox"/> _____
2. Lungs	<input type="checkbox"/>	<input type="checkbox"/> _____
3. Brain	<input type="checkbox"/>	<input type="checkbox"/> _____
4. Liver	<input type="checkbox"/>	<input type="checkbox"/> _____
5. Kidney	<input type="checkbox"/>	<input type="checkbox"/> _____
6. Spleen	<input type="checkbox"/>	<input type="checkbox"/> _____
7.Stomach	<input type="checkbox"/>	<input type="checkbox"/> _____

SYSTEMIC EXAMINATION:

- 1.Cardio Vascular System _____
- 2.Respiratory System _____
- 3.Gastrointestinal System _____
- 4.Central Nervous System _____
- 5.Uro genital System _____
- 6.Endocrine System _____

SIDDHA SYSTEM OF EXAMINATION

[1] ENVAGAI THERVU [EIGHT-FOLD EXAMINATION]

I. NAADI (KAI KURI) (RADIAL PULSE READING)

(a) Naadi Nithanam (Pulse Appraisal)

1. Kalam (Pulse reading season)

- | | | | |
|-------------------------------------|--------------------------|--------------------------------------|--------------------------|
| 1. Kaarkaalam
(Rainy season) | <input type="checkbox"/> | 2. Koothirkaalam
(Autumn) | <input type="checkbox"/> |
| 3. Munpanikaalam
(Early winter) | <input type="checkbox"/> | 4. Pinpanikaalam
(Late winter) | <input type="checkbox"/> |
| 5. Ilavenirkaalam
(Early summer) | <input type="checkbox"/> | 6. Muthuvenirkaalam
(Late summer) | <input type="checkbox"/> |

2. Desam (Climate of the patient's habitat)

- | | | | |
|-------------------------|--------------------------|--------------------|--------------------------|
| 1. Kulir
(Temperate) | <input type="checkbox"/> | 2. Veppam
(Hot) | <input type="checkbox"/> |
|-------------------------|--------------------------|--------------------|--------------------------|

- | | | | | | | |
|------------------|------------|--------------------------|-------------|--------------------------|-----------|--------------------------|
| 3. Vayathu (Age) | 1. 1-33yrs | <input type="checkbox"/> | 2. 34-66yrs | <input type="checkbox"/> | 3. 67-100 | <input type="checkbox"/> |
|------------------|------------|--------------------------|-------------|--------------------------|-----------|--------------------------|

4. Udal Vanmai (General body condition)

- | | | | | | |
|------------------------------|--------------------------|-----------------------|--------------------------|---------------------|--------------------------|
| 1. Iyyalbu
(Normal built) | <input type="checkbox"/> | 3. Valivu
(Robust) | <input type="checkbox"/> | 4. Melivu
(Lean) | <input type="checkbox"/> |
|------------------------------|--------------------------|-----------------------|--------------------------|---------------------|--------------------------|

5. Vanmai (Expansile Nature)

- | | | | |
|-----------|--------------------------|-----------|--------------------------|
| 1. Vanmai | <input type="checkbox"/> | 2. Menmai | <input type="checkbox"/> |
|-----------|--------------------------|-----------|--------------------------|

6. Panbu (Habit)

- | | | | | | |
|------------------------------|--------------------------|-------------------------------|--------------------------|---------------------------|--------------------------|
| 1. Thannadai
(Playing in) | <input type="checkbox"/> | 2. Puranadai
(Playing out) | <input type="checkbox"/> | 3. Illaitthal
(Feeble) | <input type="checkbox"/> |
| 4. Kathithal
(Swelling) | <input type="checkbox"/> | 5. Kuthithal
(Jumping) | <input type="checkbox"/> | 6. Thullal
(Frisking) | <input type="checkbox"/> |

- | | | | | | |
|-------------------------------|--------------------------|-----------------------------|--------------------------|-----------------------------|--------------------------|
| 7. Azhutthal
(ducking) | <input type="checkbox"/> | 8. Padutthal
(Lying) | <input type="checkbox"/> | 9. Kalatthal
(Blending) | <input type="checkbox"/> |
| 10. Munnokku
(Advancing) | <input type="checkbox"/> | 11. Pinnokku
(Flinching) | <input type="checkbox"/> | 12. Suzhalal
(Revolving) | <input type="checkbox"/> |
| 13. Pakkamnokku
(Swerving) | <input type="checkbox"/> | | | | |

(b) Naadi nadai (Pulse Play)

- | | | | | | |
|---------------|--------------------------|----------------|--------------------------|---------------|--------------------------|
| 1. Vali | <input type="checkbox"/> | 2. Azhal | <input type="checkbox"/> | 3. Iyyam | <input type="checkbox"/> |
| 4. Vali Azhal | <input type="checkbox"/> | 5. Azhal Vali | <input type="checkbox"/> | 6. Iyya Vali | <input type="checkbox"/> |
| 7. Vali Iyyam | <input type="checkbox"/> | 8. Azhal Iyyam | <input type="checkbox"/> | 9. Iyya Azhal | <input type="checkbox"/> |

II.NAA (TONGUE)

- | | | | | |
|---------------------------------------|---------------------|--------------------------|-----------------------|--------------------------|
| 1. Maa Padinthuruthal
(Coatedness) | 1.Present | <input type="checkbox"/> | 2. Absent | <input type="checkbox"/> |
| 2. Niram
(Colour) | 1.Karuppu
(Dark) | <input type="checkbox"/> | 2. Manjal
(Yellow) | <input type="checkbox"/> |
| | | | 3. Velluppu
(Pale) | <input type="checkbox"/> |
| 3. Suvai
(Taste sensation) | 1.Pulippu
(Sour) | <input type="checkbox"/> | 2. Kaippu
(Bitter) | <input type="checkbox"/> |
| | | | 3. Inippu
(Sweet) | <input type="checkbox"/> |
| 4. Vedippu
(Fissure) | 1. Present | <input type="checkbox"/> | 2. Absent | <input type="checkbox"/> |
| 5. Vai neer ooral
(Salivation) | 1.Normal | <input type="checkbox"/> | 2. Increased | <input type="checkbox"/> |
| | | | 3.Reduced | <input type="checkbox"/> |

III.NIRAM (COMPLEXION)

- | | | | | | |
|----------------------|--------------------------|-------------------------|--------------------------|----------------------|--------------------------|
| 1. Karuppu
(Dark) | <input type="checkbox"/> | 2.Manjal
(Yellowish) | <input type="checkbox"/> | 3.Velluppu
(Fair) | <input type="checkbox"/> |
|----------------------|--------------------------|-------------------------|--------------------------|----------------------|--------------------------|

IV. MOZHI (VOICE)

- | | | | | | |
|---------------------------------|--------------------------|---------------------------------|--------------------------|-----------------------------------|--------------------------|
| 1. Sama oli
(Medium pitched) | <input type="checkbox"/> | 2 Urattha oli
(High pitched) | <input type="checkbox"/> | 3.Thazhantha oli
(Low pitched) | <input type="checkbox"/> |
|---------------------------------|--------------------------|---------------------------------|--------------------------|-----------------------------------|--------------------------|

V. VIZHI (EYES)

1. Niram (Venvizhi) (Discolouration)

1. Karuppu
(Dark)

☐

2. Manjal
(Yellow)

☐

3. Sivappu
(Red)

☐

4. Velluppu
(White)

☐

5. No Discoloration

☐

2. Kanneer (Tears)

1. Normal

☐

2. Increased

☐

3. Reduced

☐

3. Erichchal (Burning sensation)

1. Present

☐

2. Absent

☐

4. Peelai seruthal (Mucus excrements)

1. Present

☐

2. Absent

☐

VI. MEI KURI (PHYSICAL SIGNS)

1. Veppam (Warmth)

1. Mitham
(Mild)

☐

2. Migu
(Moderate)

☐

3. Thatpam
(Low)

☐

2. Viyarvai (Sweat)

1. Increased

☐

2. Normal

☐

3. Reduced

☐

3. Thodu vali (Tenderness)

1. Absent

☐

2. Present

☐

VII. MALAM (STOOLS)

1. Niram (Color)

1. Karuppu
(Dark)

☐

2. Manjal
(Yellowish)

☐

3. Sivappu
(Reddish)

☐

4. Velluppu
(Pale)

☐

2. Sikkal (Constipation)

1. Present

☐

Absent

☐

3. Sirutthal (Poorly formed stools)

1. Present

☐

Absent

☐

4. Kalichchal (Loose watery stools)	1. Present	<input type="checkbox"/>	2. Absent	<input type="checkbox"/>
5. Seetham (Watery and mucoid excrements)	1. Present	<input type="checkbox"/>	2. Absent	<input type="checkbox"/>
6. Vemmai (Warmth)	1. Present	<input type="checkbox"/>	2. Absent	<input type="checkbox"/>
7. History of habitual constipation	1. Present	<input type="checkbox"/>	2. Absent	<input type="checkbox"/>
8. Passing of	a) Mucous	1. Yes <input type="checkbox"/>	2. No	<input type="checkbox"/>
	b) Blood	1. Yes <input type="checkbox"/>	2. No	<input type="checkbox"/>

VIII. MOOTHIRAM (URINE)

(a) NEER KURI (PHYSICAL CHARACTERISTICS)

1. Niram (colour)

Colourless	<input type="checkbox"/>	Milky purulent	<input type="checkbox"/>	orange	<input type="checkbox"/>
Red	<input type="checkbox"/>	Greenish	<input type="checkbox"/>	dark brown	<input type="checkbox"/>
Bright red	<input type="checkbox"/>	Black	<input type="checkbox"/>	Brown red or yellow	<input type="checkbox"/>

2. Manam (odour)

	Yes	No
Ammonical	: <input type="checkbox"/>	<input type="checkbox"/>
Fruity	: <input type="checkbox"/>	<input type="checkbox"/>
Others	: _____	

3. Edai (Specific gravity)

	Yes	No
Normal (1.010-1.025)	: <input type="checkbox"/>	<input type="checkbox"/>
High Specific gravity (>1.025)	: <input type="checkbox"/>	<input type="checkbox"/>
Low Specific gravity (<1.010)	: <input type="checkbox"/>	<input type="checkbox"/>
Low and fixed Specific gravity (1.010-1.012):	<input type="checkbox"/>	<input type="checkbox"/>

4. Alavu(volume)

Yes

No

Normal (1.2-1.5 lt/day)

:

☐☐

Polyuria (>2lt/day)

:

☐☐

Oliguria (<500ml/day)

:

☐☐**5. Nurai(froth)**

Yes

No

Clear

:

☐☐

Cloudy

:

☐☐**6.Enjal (deposits)**

:

Yes

No

☐☐**(b) NEI KURI (oil spreading sign)**1. Aravam
(Serpentine fashion)☐2. Mothiram
(Ring)☐3. Muthu
(Pearl beaded appear)☐4. Aravil Mothiram
(Serpentine in ring fashion)☐5. Aravil Muthu
(Serpentine and Pearl patterns)☐6. Mothirathil Muthu
(Ring in pearl fashion)☐7. Mothirathil Aravam
(Ring in Serpentine fashion)☐8. Muthil Aravam
(Pearl in Serpentine fashion)☐9. Muthil Mothiram
(Pearl in ring fashion)☐10. Asathiyam
(Incurable)☐11. Mellena paraval
(Slow spreading)☐

12.others:_____

[2]. MANIKADAI NOOL (Wrist circummetric sign) : _____ fbs

[3]. IYMPORIGAL /IYMPULANGAL
(Penta sensors and its modalities)

	1. Normal	2. Affected
1. Mei (skin)	<input type="checkbox"/>	<input type="checkbox"/>
2. Vaai (Mouth/ Tongue)	<input type="checkbox"/>	<input type="checkbox"/>
3. Kan (Eyes)	<input type="checkbox"/>	<input type="checkbox"/>
4. Mookku (Nose)	<input type="checkbox"/>	<input type="checkbox"/>
5. Sevi (Ears)	<input type="checkbox"/>	<input type="checkbox"/>

[4]. KANMENTHIRIYANGAL /KANMAVIDAYANGAL
(Motor machinery and its execution)

	1. Normal	2. Affected
1. Kai (Hands)	<input type="checkbox"/>	<input type="checkbox"/>
2. Kaal (Legs)	<input type="checkbox"/>	<input type="checkbox"/>
3. Vaai (Mouth)	<input type="checkbox"/>	<input type="checkbox"/>
4. Eruvai (Analepy)	<input type="checkbox"/>	<input type="checkbox"/>
5. Karuvaai (Birth canal)	<input type="checkbox"/>	<input type="checkbox"/>

[5]. YAKKAI (SOMATIC TYPES)

Vatha constitution	Pitha constitution	Kaba constitution
Lean and lanky built <input type="checkbox"/>	Thin covering of bones and joints <input type="checkbox"/>	Plumpy joints and limbs <input type="checkbox"/>
Hefty proximities of limbs <input type="checkbox"/>	Always found with warmth, sweating and offensive body odour <input type="checkbox"/>	Broad forehead and chest <input type="checkbox"/>
Cracking sound of joints on walking <input type="checkbox"/>	Wrinkles in the skin <input type="checkbox"/>	Sparkling eyes with clear sight <input type="checkbox"/>
Dark and thicker eye lashes <input type="checkbox"/>	Red and yellow admixed complexion <input type="checkbox"/>	Lolling walk <input type="checkbox"/>
Dark and light admixed complexion <input type="checkbox"/>	Easily suffusing eyes due to heat and alcohol <input type="checkbox"/>	Immense strength despite poor eating <input type="checkbox"/>
Split hair <input type="checkbox"/>	Sparse hair with greying <input type="checkbox"/>	High tolerance to hunger, thirst and fear <input type="checkbox"/>
Clear words <input type="checkbox"/>	Intolerance to hunger, thirst and heat <input type="checkbox"/>	Exemplary character with good memory power <input type="checkbox"/>
Scant appetite for cold food items <input type="checkbox"/>	Inclination towards perfumes like sandal <input type="checkbox"/>	More liking for sweet taste <input type="checkbox"/>
Poor strength despite much eating <input type="checkbox"/>	Slender eye lashes <input type="checkbox"/>	Husky voice <input type="checkbox"/>
Loss of libido <input type="checkbox"/>	Pimples and moles are plenty <input type="checkbox"/>	
In generosity <input type="checkbox"/>		
Sleeping with eyes half closed <input type="checkbox"/>		

RESULTANT SOMATIC TYPE: _____

[6] GUNAM

1. Sathuva Gunam ☐

2. Rajo Gunam ☐

3. Thamo Gunam ☐

[7] UYIR THATHUKKAL

A. VALI

1. Normal

2. Affected

1. Praanan
(Heart centre) ☐ ☐

2. Abaanan
(Matedial of muladhar centre) ☐ ☐

3. Samaanan
(Navel centre) ☐ ☐

4. Udhaanan
(Forehead centre) ☐ ☐

5. Viyaanan
(Throat centre) ☐ ☐

6. Naahan
(Higher intellectual function) ☐ ☐

7. Koorman
(Air of yawning) ☐ ☐

8. Kirukaran
(Air of salivation) ☐ ☐

9. Devathathan
(Air of laziness) ☐ ☐

10. Dhananjeyan
(Air that acts on death) ☐ ☐

B. AZHAL

	1. Normal	2. Affected
1. Anala pittham (Gastric juice)	<input type="checkbox"/>	<input type="checkbox"/>
2. Prasaka pittham (Bile)	<input type="checkbox"/>	<input type="checkbox"/>
3. Ranjaka pittham (Haemoglobin)	<input type="checkbox"/>	<input type="checkbox"/>
4. Aalosaka pittham (Aqueous Humour)	<input type="checkbox"/>	<input type="checkbox"/>
5. Saathaka pittham (Life energy)	<input type="checkbox"/>	<input type="checkbox"/>

C. IYYAM

	1. Normal	2. Affected
1. Avalambagam (Serum)	<input type="checkbox"/>	<input type="checkbox"/>
2. Kilethagam (saliva)	<input type="checkbox"/>	<input type="checkbox"/>
3. Pothagam (lymph)	<input type="checkbox"/>	<input type="checkbox"/>
4. Tharpagam (cerebrospinal fluid)	<input type="checkbox"/>	<input type="checkbox"/>
5. Santhigam (Synovial fluid)	<input type="checkbox"/>	<input type="checkbox"/>

[8] UDAL THATHUKKAL

INCREASED SAARAM (CHYLE)	DECREASED SAARAM(CHYLE)
Loss of appetite <input type="checkbox"/>	Loss weight <input type="checkbox"/>
Excessive salivation <input type="checkbox"/>	Tiredness <input type="checkbox"/>
Loss of perseverance <input type="checkbox"/>	Dryness of the skin <input type="checkbox"/>
Excessive heaviness <input type="checkbox"/>	Diminished activity of the sense organs <input type="checkbox"/>
White musculature <input type="checkbox"/>	
Cough, dyspnea, excessive sleep <input type="checkbox"/>	
Weakness in all joints of the body <input type="checkbox"/>	

A. SAARAM: INCREASED ☐ DECREASED ☐

INCREASED CENNEER(BLOOD)	DECREASED CENNEER(BLOOD)
Boils in different parts of the body <input type="checkbox"/>	Anemia <input type="checkbox"/>
Anorexia <input type="checkbox"/>	Tiredness <input type="checkbox"/>
Mental disorder <input type="checkbox"/>	Neuritis <input type="checkbox"/>
Splenomegaly <input type="checkbox"/>	Lassitude <input type="checkbox"/>
Colic pain <input type="checkbox"/>	Pallor of the body <input type="checkbox"/>
Increased pressure <input type="checkbox"/>	
Reddish eye and skin <input type="checkbox"/>	
Jaundice <input type="checkbox"/>	
Haematuria <input type="checkbox"/>	

B. CENNEER: INCREASED ☐ DECREASED ☐

INCREASED OON (MUSLE)	DECREASED OON (MUSLE)
Cervical lymphadenitis <input type="checkbox"/>	Impairment of sense organs <input type="checkbox"/>
Vernical ulcer <input type="checkbox"/>	Joint pain <input type="checkbox"/>
Tumour in face ,abdomen, thigh, genitalia <input type="checkbox"/>	Jaw, thigh and genitalia gets shortened <input type="checkbox"/>
Hyper muscular in the cervical region <input type="checkbox"/>	

C. OON: INCREASED ☐ DECREASED ☐

INCREASED KOZHUPPU (ADIPOSE TISSUE)	DECREASED KOZHUPPU (ADIPOSE TISSUE)
Cervical lymph adenitis <input type="checkbox"/>	Pain in the hip region <input type="checkbox"/>
Vernical ulcer <input type="checkbox"/>	Disease of the spleen <input type="checkbox"/>
Tumour in face, abdomen, thigh, genitalia <input type="checkbox"/>	
Hyper muscular in the cervical region <input type="checkbox"/>	
Dyspnoea <input type="checkbox"/>	
Loss of activity <input type="checkbox"/>	

D. KOZHUPPU: INCREASED ☐ DECREASED ☐

INCREASED ENBU (BONE)	DECREASED ENBU (BONE)
Growth in bones and teeth <input type="checkbox"/>	Bones diseases <input type="checkbox"/>
	Loosening of teeth <input type="checkbox"/>
	Nails splitting <input type="checkbox"/>
	Falling of hair <input type="checkbox"/>

E. ENBU: INCREASED ☐ DECREASED ☐

INCREASED MOOLAI (BONE MARROW)	DECREASED MOOLAI (BONE MARROW)
Heaviness of the body <input type="checkbox"/>	Osteoporosis <input type="checkbox"/>
Swollen eyes <input type="checkbox"/>	Sunken eyes <input type="checkbox"/>
Swollen phalanges chubby fingers <input type="checkbox"/>	
Oliguria <input type="checkbox"/>	
Non healing ulcer <input type="checkbox"/>	

F. MOOLAI: INCREASED ☐ DECREASED ☐

INCREASED SUKKILAM/SURONITHAM (SPERM OR OVUM)	DECREASED SUKKILAM/SURONITHAM (SPERM OR OVUM)
Infatuation and lust towards women / men <input type="checkbox"/>	Failure in reproduction <input type="checkbox"/>
Urinary calculi <input type="checkbox"/>	Pain in the genitalia <input type="checkbox"/>

G. SUKKILAM/SURONITHAM: INCREASED ☐ DECREASED ☐

[9] MUKKUTRA MIGU GUNAM

I. Vali Migu Gunam	1. Present	2. Absent
1. Emaciation	<input type="checkbox"/>	<input type="checkbox"/>
2. Complexion – blackish	<input type="checkbox"/>	<input type="checkbox"/>
3. Desire to take hot food	<input type="checkbox"/>	<input type="checkbox"/>
4. Shivering of body	<input type="checkbox"/>	<input type="checkbox"/>
5. Abdominal distension	<input type="checkbox"/>	<input type="checkbox"/>
6. Constipation	<input type="checkbox"/>	<input type="checkbox"/>
7. Insomnia	<input type="checkbox"/>	<input type="checkbox"/>
8. Weakness	<input type="checkbox"/>	<input type="checkbox"/>
9. Defect of sense organs	<input type="checkbox"/>	<input type="checkbox"/>
10. Giddiness	<input type="checkbox"/>	<input type="checkbox"/>
11. Lack of interest	<input type="checkbox"/>	<input type="checkbox"/>

II. Pitham Migu Gunam**1. Present****2. Absent**

- | | | |
|--|--------------------------|--------------------------|
| 1. Yellowish discolouration of skin | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Yellowish discolouration of the eye | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Yellow coloured urine | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Yellowishness of faeces | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Increased appetite | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Increased thirst | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Burning sensation over the body | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Sleep disturbance | <input type="checkbox"/> | <input type="checkbox"/> |

III. Kapham migu gunam**1. Present****2. Absent**

- | | | |
|----------------------------------|--------------------------|--------------------------|
| 1. Increased salivary secretion | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Reduced activeness | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Heaviness of the body | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Body colour – fair complexion | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Chillness of the body | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Reduced appetite | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Eraippu | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Increased sleep | <input type="checkbox"/> | <input type="checkbox"/> |

[10]. NOIUTRA KALAM

- | | | | |
|-------------------------------------|--------------------------|---------------------------------------|--------------------------|
| 1. Kaarkaalam
(Aug15-Oct14) | <input type="checkbox"/> | 2. Koothirkaalam
(Oct15-Dec14) | <input type="checkbox"/> |
| 3. Munpanikaalam
(Dec15-Feb14) | <input type="checkbox"/> | 4. Pinpanikaalam
(Feb15-Apr14) | <input type="checkbox"/> |
| 5. Ilavanirkaalam
(Apr15-June14) | <input type="checkbox"/> | 6. Muthuvenirkaalam
(June15-Aug14) | <input type="checkbox"/> |

[11]. **NOI UTRA NILAM**

1. Kurunji
(Hilly terrain)

☐

2. Mullai
(Forest range)

☐

3. Marutham
(Plains)

☐

4. Neithal
(Coastal belt)

☐

5. Paalai
(Desert)

☐

[12]. Date of Birth

[13]. Time of Birth

AM

PM

[14]. Place of Birth:

[15]. **Rasi (Zodiac Sign)**

1. Mesam

☐

2. Rishabam

☐

3. Midhunam

☐

4. Katakam

☐

5. Simmam

☐

6. Kanni

☐

7. Thulam

☐

8. Viruchiam

☐

9. Dhanusu

☐

10. Maharam

☐

11. Kumbam

☐

12. Meenam

☐

[16]. Natchathiram(birth stars):

1. Aswini	<input type="checkbox"/>	2.Barani	<input type="checkbox"/>	3.Karthikai	<input type="checkbox"/>
4.Rohini	<input type="checkbox"/>	5.Mirugaseeradam	<input type="checkbox"/>	6. Thiruvathirai	<input type="checkbox"/>
7. Punarpoosam	<input type="checkbox"/>	8. Poosam	<input type="checkbox"/>	9. Ayilyam	<input type="checkbox"/>
10. Makam	<input type="checkbox"/>	11.Pooram	<input type="checkbox"/>	12. Utthiram	<input type="checkbox"/>
13. Astham	<input type="checkbox"/>	14.Chithirai	<input type="checkbox"/>	15. Swathi	<input type="checkbox"/>
16. Visakam	<input type="checkbox"/>	17. Anusam	<input type="checkbox"/>	18.Kettai	<input type="checkbox"/>
19 Moolam	<input type="checkbox"/>	20. Pooradam	<input type="checkbox"/>	21. Uthiradam	<input type="checkbox"/>
22.Thiruvonam	<input type="checkbox"/>	23.Avittam	<input type="checkbox"/>	24. Sadayam	<input type="checkbox"/>
25.Poorattathi	<input type="checkbox"/>	26.Uthirattathi	<input type="checkbox"/>	27.Revathi	<input type="checkbox"/>
28. Not Known	<input type="checkbox"/>				

ANNEXURE-IV

NATIONAL INSTITUTE OF SIDDHA, CHENNAI – 47

DEPARTMENT OF NOI NAADAL
A STUDY ON NEERKURI NEIKURI DIAGNOSTIC METHODOLOGY IN
MANTHARA KAASAM/BRONCHIAL ASTHMA”

Form –III

LABORATORY INVESTIGATION

HEMATOLOGY

Haemoglobin:gm %

Total RBC count:.....millions cells / cu.mm

Total WBC count:.....cells / cu.mm

Differential count:

Polymorphs%

Lymphocytes%

Monocytes%

Basophils%

Eosinophils%

Platelet count :cells / cu.mm

ESR (mm) ½ Hr:

1 Hr:

BIO CHEMISTRY

Sugar (F)mg%

PPmg%

Total cholesterol :mg %

HDL mg %

LDL :mg %

VLDL : mg%

Urea:mg %
Creatinine :mg %
Uric acid: mg %
Serum total bilirubin:mg%
Direct bilirubin:mg %
Indirect bilirubin:mg %
SGOT:IU
SGPT:IU
Alkaline phosphatase:IU
Serum Total Protein :gm %
Serum Albumin:gm %
Serum Globulin:.....gm %
Serum Calcium :mg %
Serum Phosphorous :mg %
AEC :

URINALYSIS:

Colour :
Appearance :
Specific Gravity:
Ph :
Red blood cells :
White blood cells:
Pus cells: :
Epithelial cells:
Protein :

Glucose :

Ketones :

Bilirubin :

Bile salts :

Bile pigments :

Urobilinogen :

CHEST X -RAY PA VIEW :

PEFR (Peak expiratory flow rate) :

SPECIFIC INVESTGATIONS

SPUTUM AFB:

Date:

Signature of the Doctor:

ANNEXURE-V

NATIONAL INSTITUTE OF SIDDHA , CHENNAI-47

DEPARTMENT OF NOI NAADAL

A STUDY ON NEERKURI NEIKURI DIAGNOSTIC METHODOLOGY

“MANTHARA KAASAM/ BRONCHIAL ASTHMA”

REGISTER NO:32103202 (2011-2012)

FORM IV A

INFORMED WRITTEN CONSENT FORM

Iexercising my free power of choice, hereby give my consent to be included as a subject in the diagnostic trial entitled “ A Study on Diagnostic Methodology in Siddha System For “Neerkuri – Neikuri MANTHARA KAASAM”. I may be asked to give urine and blood samples during the study.

I have been informed to about the study to my satisfaction by the investigator and the purpose of this trial and the nature of study and the laboratory investigations. I also give my consent to publish my urine sample photographs in scientific conferences and reputed scientific journals for the betterment of clinical research.

I am also aware of my right to opt out of the trial at any time during the course of the trial without having to give the reasons for doing so.

NAME OF THE VOLUNTEER:

SIGNATURE OR THUMB IMPRESSION

OF THE VOLUNTEER:

SIGNATURE OF INVESTIGATOR :

SIGNATURE OF H O D :

DATE:

தேசிய சித்த மருத்துவ நிறுவனம், சென்னை-47.

நோய் நாடல் துறை

மந்தார காசத்தில் நீர்க்குறி நெய்க்குறி பற்றிய ஆய்வு“

பதிவு எண்-32103202 (2010-2013)

ஒப்புதல் படிவம்

ஆய்வாளரால் சான்றளிக்கப்பட்டது

நான் இ ந்த ஆய்வை குறித்த அனைத்து விபரங்களையும்
நோயாளிக்கு

புரியும் வகையில் எடுத்துரைத்தேன் என உறுதியளிக்கிறேன்.

தேதி :

கையொப்பம் :

இ டம்:

பெயர் :

நோயாளியின் ஒப்புதல்

நான், _____ என்னுடைய சுதந்திரமாக தேர்வு
செய்யும் உரிமையைக் கொண்டு இங்கு தலைப்பிடப்பட்ட மந்தார
காசத் த்தில் நீர்க்குறி நெய்க்குறி பற்றிய ஆய்வு“ யை கணிப்பதற்கான
மருத்துவ ஆய்விற்கு என்னை உட்படுத்த ஒப்புதல் அளிக்கிறேன்.

என்னிடம் இ ந்தமருத்துவ ஆய்வின் காரணத்தையும்,
மருத்துவ ஆய்வுக்கூட பரிசோதனைகள் பற்றி திருப்தி அளிக்கும் வகையில்
ஆய்வு மருத்துவரால் விளக்கிக் கூறப்பட்டது.

இந்த ஆய்வில் எடுக்கப்படும் எனது சிறுநீர் புகைப்படங்களை
கட்டுரைகளில் வெளியிட ஒப்புதல் அளிக்கிறேன்

நான் இந்த மருத்துவ ஆய்வின் போது காரணம் எதுவும் கூறாமல்,
எப்பொழுது வேண்டுமானாலும் இ ந்த ஆய்விலிருந்து என்னை விடுவித்து
கொள்ளும் உரிமையை தெரிந்திருக்கின்றேன்.

தேதி:

இ டம்

கையொப்பம்:

பெயர் :

தேதி :

சாட்சிக்காரர் கையொப்பம்:

இ டம்:

பெயர் :

உறவுமுறை:

ANNEXURE-VI

NATIONAL INSTITUTE OF SIDDHA , CHENNAI-47

DEPARTMENT OF NOI NAADAL

**A STUDY ON NEERKKURI - NEIKKURI DIAGNOSTIC METHODOLOGY
IN “MANTHARA KAASAM/BRONCHIAL ASTHMA”.**

REGISTER NO:32103202 (2011-2013)

FORM - IV-E

INFORMATION SHEET

PURPOSE OF RESEARCH AND BENEFITS:

The diagnostic research study in which your participation is proposed to assess the accuracy of the neikuri procedure adopted in MANTHARA KAASAM patients. It is expected that you would benefit from this study. Knowledge gained from this study would be of benefit to patients suffering from such conditions for the diagnosis and prognosis.

STUDY PROCEDURE:

You will be interviewed and examined as OP and IP patients at the study centre. At the first visit the physician will conduct a brief physical examination and assess the condition followed by blood pressure and routine blood and urine analysis. After matching the inclusion criteria you will be included in this study and neikuri procedure is done by the collection of your urine sample again.

POSSIBLE RISK:

During this study there may be a minimum pain to you while drawing blood sample.

CONFIDENTIALITY:

Your medical records will be treated with confidentiality and will be revealed only to other doctors / scientists. The results of this study may be published in a scientific journal, but you will not be identified by your name.

YOUR PARTICIPATION AND YOUR RIGHTS:

Your participation in this study is voluntary and you may be withdrawn from this study anytime without having to give reasons for the same. You will be informed about the findings that occur during the study. If you do agree to take part in this study, your health record will need to be made available to the investigators. If you don't wish to participate at any stage, the level of care you receive will in no way be affected.

The Ethics committee cleared the study for undertaking at OPD and IPD, NIS. Should any question arise with regards to this study you contact following person

INVESTIGATOR

:Dr.P.Chithra,PG scholar,
Department of Noi Naadal
National Institute of Siddha,
Chennai-47.
Mobile no:9150487201

தேசிய சித்த மருத்துவ நிறுவனம், சென்னை47.

நோய் நாடல் துறை

“மந்தார காசத்தில் நீர்க்குறி நெய்க்குறி பற்றிய ஆய்வு”

நோயாளியின் தகவல் படிவம்

ஆய்வின் நோக்கமும் பயனும்:

தாங்கள் பங்கேற்கும் “மந்தார காசத்தில் நீர்க்குறி நெய்க்குறி பற்றிய ஆய்வு” சித்த மருத்துவ முறையில் நோயை கணிப்பதற்கான ஓர் ஆய்வுமுறை. இவ்வாய்வு தங்களின் நோய்கணிப்பை பற்றியும் நாளாக்கு நாள் இருக்கும் நோயின் தன்மை பற்றியும் அறிய உதவும்.

ஆய்வு முறை:

தாங்கள் நோக்காணல் மற்றும் பரிசோதனைகளின் மூலம் உள்நோயாளி, வெளிநோயாளி பிரிவில் ஆய்வு செய்யப்படுவீர்கள். முதல் நோக்காணலின்போது ஆய்வாளரால் உடல் பரிசோதனை, நீர் மற்றும் இரத்த பரிசோதனை செய்து குறிப்பிட்ட குறிகுணங்கள் இருப்பின் இவ்வாய்விற்காக எடுத்துக் கொள்ளப்படுவீர்கள்.

நேரும் உபாதைகள்:

இவ்வாய்வில் இரத்த பரிசோதனைக்காக இரத்தம் எடுக்கும்போது சிறிது

வலி ஏற்படலாம்.

மந்தணம்:

தங்களின் மருத்துவ ஆவணங்கள் அனைத்தும் மருத்துவர், ஆய்வாளர் அல்லாத பிறரிடம் தெரிவிக்கப்படமாட்டாது.

நோயாளியின் பங்களிப்பும் உரிமைகளும்:

இவ்வாய்வில் தங்களின் பங்களிப்பு தன்னிச்சையானது . இவ்வாய்வில் தாங்கள் ஒத்துழைக்க இயலவில்லையெனில் எப்பொழுது வேண்டுமானாலும் காரணம் எதுவும் கூறாமல் விலகிக்கொள்ளலாம். இவ்வாய்வின்போது அறியப்படும்

தகவல்கள் தங்களுக்கு தெரிவிக்கப்படும். நோயாளியின் ஒப்புதலுக்கிணங்க நோய்கணிப்பு விவரங்களை ஆய்வாளர் பயன்படுத்திக்கொள்வார். நோயாளி ஆய்வினிடையே ஒத்துழைக்க மறுத்தாலும் எந்த நிலையிலும் நோயாளியை கவனிக்கும் விதம் பாதிக்கப்பட மாட்டது. நிறுவன நெறிமுறை குழுவும் மேற்கண்ட ஆய்வினை மேற்கொள்ள ஒப்புதல் அளித்துள்ளது. ஆய்வு குறித்த சந்தேகங்கள் இருப்பின் கீழ்க்கண்ட நபரை தொடர்பு கொள்ளவும்.

பட்டமேற்படிப்பாளர் :

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